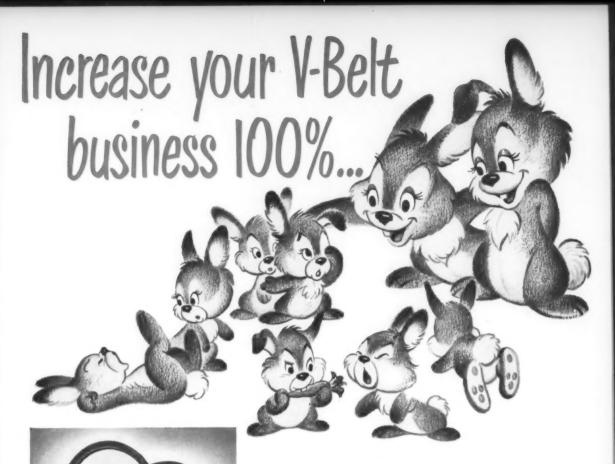
APRIUM1950

Commercial Refrigeration

AND AIR CONDITIONING



MERCHANDISING, SELLING, INSTALLATION AND MAINTENANCE OF COMMERCIAL REFRIGERATION AND AIR CONDITIONING EQUIPMENT



with the **Dayton**"take-home-a-spare" plan

When customers call for a replacement V-Belt, Dayton Dealers say: "Sure—here's the right belt. And why not carry a spare? Then if a belt breaks on a Sunday or Holiday when we're not open, you have a replacement Dayton V-Belt for that emergency."

Belt sales increase up to 100% when customers say: "O.K.—better give me the spare, too." They appreciate this service; and you'll get first call to make any installation.

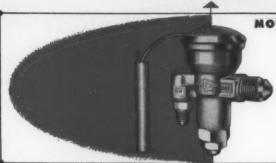
Dayton's "Take-home-a-spare" sales plan includes Salesmaker assortments of fast-selling belt sizes, beltmatching stick, store and window posters, display and selling suggestions. To get this profitable plan in your area now, call the Dayton jobber, or write:

THE DAYTON RUBBER CO., DAYTON 1, OHIO

Dayton Rubber

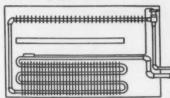
WORLD'S LARGEST MANUFACTURER OF V-BELTS

You name the problem **ALCO** has the answer-and the right valve



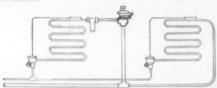
MOTOR OVERLOAD PROTECTION?

Type 402 Thermo Valve — Up to $\frac{1}{2}$ ton F-12 — $\frac{1}{2}$ to 1 ton Methyl Chloride. Pressure limiting construction for motor overload protection. Low or high temperature for any type fixture.



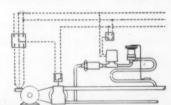
PREVENT FREEZING, DE-HUMIDIFICATION?

Type 760 Evapotrol Regulator maintains evaporator pressure. Prevents freezing, icing and de-humidification. Ideal for Butter and Milk Boxes, Meat Boxes, Candy Cases, Flower Cases, Vegetable Cases and Water Coolers.



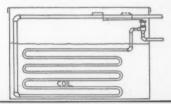
POSITIVE TEMPERATURE CONTROL?

Type \$1 and \$2 Solenoid Valves are tight seating and are unexcelled for positive temperature control, and liquid stop service.



ICE MAKERS?

Type "TK" Thermo Valve — $\frac{1}{2}$ to 2 tons — for Ice Makers and high capacity box and blower type fixtures.



ALCO HAS REFRIGERATION UNDER CONTROL

A QUARTER-CENTURY OF PIONEERING AND PROGRESS

Designers and Manufacturers of Thermostatic Expansion Valves; Evaporator Pressure Regulators; Solenaid Valves; Float Valves; Float Switches. ALCO VALVE CO.

SEE YOUR ALCO WHOLESALER

427

The Time is RIGHT to sell TEMPRITE INDUSTRIAL WATER COOLERS

6 Clinchers to help you CLOSE SALES!

- 1. Cools water instantaneously!
- 2. Conserves water by recirculating.
- 3. Accurately controls water temperatures!
- 4. Saves valuable floor space!
- 5. High efficiency means lower operating costs!
- 6. Compact simplicity means lower installation costs!

Alarming water shortages in New York City and other areas are bringing about legislation to control the use of water, especially in industrial cooling processes. Water conservation is urgent and Temprite fits right into the picture! The time is RIGHT to sell TEMPRITE INDUSTRIAL WATER COOLERS!

Alert refrigeration contractors have discovered plenty of ammunition in the 6 sales clinchers listed above, but beyond this is an even bigger story of over-all, proven efficiency in many types of applications throughout industry. You'll find Temprite heavy duty coolers in bottling plants; in drinking water systems; photo-

graphic processing; air conditioning; for dough mixer cooling in bakeries; drum and roll cooling in plastic and wax processing; for quenching of heat treated metal, etc., etc.

Because of the high capacity and rapid recovery of these compact coolers (max. dimensions 58½" high x 14" dia.), space-consuming evaporating coils and storage tanks can be done away with. Water is cooled only as needed, reducing compressor operating time; and the famous Temprite instantaneous cooling principle permits operation on highest possible back-pressure for lowest operating cost.

ENTHUSIASTIC TEMPRITE USERS IN MANY INDUSTRIES





(Above) TYPICAL BOTTLING PLANT installation in Duffy Brothers, Inc. of Denver, was installed by the T. C. Alexander Company of the same city. Two Temprite Model F-600W Coolers, connected to two 10-ton condensing units, are capable of cooling 2370 g.p.h. (60° to 40°). Water is filtered before entering coolers, and exit temperature is accurately controlled by Temprite valve before entering carbonating and bottling equipment. During winter months when the temperature of incoming



(Above) Cooler for PHOTOGRAPHIC PROC-ESSING at Winona Summer School of Photographic Assn. of America, Winona Lake, Indiana, was installed by Claude Derry Refrig., Warsaw, Indiana. The Temprite cools 1200 g.p.h. to a constant 68°



THREE TEMPRITE Industrial Cooler Models are available, ranging in cooling capacity from 184 g.p.h. of 3300 g.p.h., depending upon temperature drop required through cooler. Can be furnished to deliver any water exit temperature from 38 to 65° on order. Lower settings can be made for cooling non-freezing alcohol solutions, brine, etc. Temprite Coolers are ideal for cooling virtually any non-viscous liquid not reacting with copper coils.

TEMPRIT	TE PRODUCTS CORP.
43 PIQI	UETTE, DETROIT 2, MICHIGAN
	Please send me complete specifications and installation data on Temprite Heavy-duty Industrial Water Coolers.

ADDRESS COMPANY

CITY_____ZONE__STATE___

water supply is lower, one cooler and condensing unit automatically cut-out of service.

Be right with Temprite

Temprite

PRODUCTS PROPORATION

43 PIQUETTE

DETROIT 2, MICHIGAN

APRIL, 1950

VOLUME 7, NO. 4

THE COVER . . . Dramatically illustrating the transformation which can be effected in food markets through the installation of adequate refrigeration equipment—and pointing up the profit possibilities for the refrigeration dealer—is this before and after sequence in Millstein's Market in Philadelphia. (The new equipment was installed by Hill-Philadelphia, Inc.)

Commercial Refrigeration

AND AIR CONDITIONING

Established 1944 as THE REFRIGERATION INDUSTRY

THIS MAGAZINE has no official affiliation with ANY group, society or association.

•

IRVING B. HEXTER President

Vice President

THEODORE T. QUINN Managing Editor

JAMES R. McCALLUM JR.

WARREN W. FARR H. S. McCLOUD Editoriol Advisers

EDWIN M. JOSEPH Circulation Director

•

Address communications to COMMERCIAL REFRIGERATION AND AIR CONDITIONING

> 1240 Ontario Street Cleveland 12, Ohio Phone: Tower 1-0264 Teletypewriter: CV-233

SALES OFFICES
CLEVELAND 13
HAROLD F. BEHM
1240 Ontario Street

NEW YORK 17 ALFRED J. MAIER 60 E. 42 Street Room 805 Murray Hill 7-3420

CHICAGO 11 FRED P. MIGNIN JR. 520 N. Michigan Ave. Room 734 Superior 7-7823

LOS ANGELES 17 FRED W. FRISENFELDT 1250 Wilshire Boulevard Room 403 Tucker 6703

A "HOW AND WHERE" ISSUE Food Market Refrigeration

FEATURES

THESE SALESMEN PUSH PROFITS, NOT PRODUCTS. CONTRACT SERVICE—DOOR-OPENER TO SALES PLANNING FOR PROFIT DANGER SPOTS IN CONDITIONAL SALE CONTRACTS CASH IN ON FROZEN FOOD CABINETS PROOF OF THE PROFIT IT TAKES ONE TO SELL ONE. SALES SLANTS ON AIR CONDITIONING 2. Prospects: Qualify 'Em, Then Follow 'Em DOES NEW EQUIPMENT PAY ITS OWN WAY? DON'T LET THE LITTLE ONES GET AWAY SHELVING—A PLUS-PROFIT ITEM WHAT EQUIPMENT FOOD STORES WILL BUY IN 1950	
PLANNING FOR PROFIT DANGER SPOTS IN CONDITIONAL SALE CONTRACTS CASH IN ON FROZEN FOOD CABINETS PROOF OF THE PROFIT IT TAKES ONE TO SELL ONE. SALES SLANTS ON AIR CONDITIONING 2. Prospects: Qualify 'Em, Then Follow 'Em DOES NEW EQUIPMENT PAY ITS OWN WAY? DON'T LET THE LITTLE ONES GET AWAY SHELVING—A PLUS-PROFIT ITEM	32
DANGER SPOTS IN CONDITIONAL SALE CONTRACTS CASH IN ON FROZEN FOOD CABINETS PROOF OF THE PROFIT IT TAKES ONE TO SELL ONE. SALES SLANTS ON AIR CONDITIONING 2. Prospects: Qualify 'Em, Then Follow 'Em DOES NEW EQUIPMENT PAY ITS OWN WAY? DON'T LET THE LITTLE ONES GET AWAY SHELVING—A PLUS-PROFIT ITEM	34
CASH IN ON FROZEN FOOD CABINETS PROOF OF THE PROFIT IT TAKES ONE TO SELL ONE. SALES SLANTS ON AIR CONDITIONING 2. Prospects: Qualify 'Em, Then Follow 'Em DOES NEW EQUIPMENT PAY ITS OWN WAY? DON'T LET THE LITTLE ONES GET AWAY SHELVING—A PLUS-PROFIT ITEM	37
PROOF OF THE PROFIT IT TAKES ONE TO SELL ONE. SALES SLANTS ON AIR CONDITIONING 2. Prospects: Qualify 'Em, Then Follow 'Em DOES NEW EQUIPMENT PAY ITS OWN WAY? DON'T LET THE LITTLE ONES GET AWAY SHELVING—A PLUS-PROFIT ITEM	39
IT TAKES ONE TO SELL ONE	40
SALES SLANTS ON AIR CONDITIONING 2. Prospects: Qualify 'Em, Then Follow 'Em DOES NEW EQUIPMENT PAY ITS OWN WAY? DON'T LET THE LITTLE ONES GET AWAY SHELVING—A PLUS-PROFIT ITEM	41
2. Prospects: Qualify 'Em, Then Follow 'Em DOES NEW EQUIPMENT PAY ITS OWN WAY? DON'T LET THE LITTLE ONES GET AWAY SHELVING—A PLUS-PROFIT ITEM	42
DOES NEW EQUIPMENT PAY ITS OWN WAY?	46
DON'T LET THE LITTLE ONES GET AWAY	
SHELVING-A PLUS-PROFIT ITEM	47
	48
WHAT FOUIPMENT FOOD STORES WILL RILY IN 1950	50
WITH EACH WELL I COD STOKES WILL BOT IN 1750	76

DEPARTMENTS

About People			 	72
BTU'S			 	31
Commercial Refrigerator Sale	es New	S	 	44
Contractor News			 	76
Here's How			 	93
Letters			 	23
New Products			 	62
Opportunities			 	90
Practical Refrigeration Appl	ication	s Manual	 	79
Refrigeration Industry News			 	51
Useful Literature			 	58
Index to Advertisers			 	95

NBP

ССА

Published monthly by Refrigeration Publications, Inc., an affiliate of Industrial Publishing Co., publishers of Applied Hydracules, Die Castings, Flow, Industry & Welding, Occupational Hazards, and The Taxicab Industry. Member, Controlled Circulation Audit, Inc., and National Business Papers Association. Not responsible for unsolicited editorial material. Subscription rates: United States and possessions—\$3.00 per year, \$5.00 for 2 years; Foreign—\$5.00 per year. Single copy price, 30 cents. All subscriptions subject to individual acceptance by the publisher.

Acceptance under Section 34.64, PL&R, authorized at Milwaukee, Wisconsin.

New G-E Capacitor Motor Has

GUILUKS that

Any way you look at it -

THE NEW TRICLAD SINGLE-PHASE CAPACITOR MOTOR

HAS MORE EYE APPEAL. MORE SALES-STIMULATING FEATURES



motor are smaller because

there's no capacitor on top

(it's in the motor base). It's 15

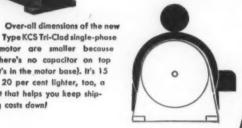
to 20 per cent lighter, too, a

fact that helps you keep ship-

ping costs down!

More compact

-with less weight to save shipping costs



Easier to install

-with thi new terminal board

A handy terminal board in the endshield takes the place of an exterior conduit box in this new motor. Remove the plate and there are all your connections (115 or 230 volts), easy to get at, easy to wire.





Runs for years

-with practically no upkeep!

Factory-greased bearings hardly ever need relubrication. But a pressure-relief greasing system makes them easy to relubricate if you want to. Also corrosion-resistant castiron enclosure protects motor from falling objects.



Smooth starting

-with this all-new transfer mechanism!

A simplified centrifugal mechanism and transfer switch give you smooth reliable starting. The latter is completely enclosed to protect contacts from dirt. Watch how service breakdowns disappear when you equip your machines with this dependable new motor.



GENER



ELECTRIC

Selland for your



PUT THIS BEAUTY ON YOUR PAYROLL NOW!

Whether you sell it by itself or build it into your machines, the new Tri-Clad single-phase capacitor motor can be one of your strongest sales allies. Arrange now to look it over at your nearest General Electric local office.

For complete details, write for Bulletin GEA-5401. Apparatus
Dept., General Electric Company, Schenetady 5, New York.



TRI CLAD

SINGLE-PHASE CAPACITOR MOTOR 1 to 5 hp

thar's **G** LAKKI

Everything a profit-making line should have, Carrier has! Completeness for year-round sales . . . products that lead the parade in features and efficiency...aggressive advertising and promotion . . . and a liberal dealer policy with long margins. It pays to sell the line with the name that sells. For complete information, clip this coupon. Carrier Corporation, Syracuse, New York.



CARRIER CORPORATION, 304 S. Geddes St., Syracuse 1, N.Y.

Please send me, without obligation, information on the Carrier Commercial Refrigeration line.

- I I AM
- I AM NOT

INTERESTED IN BECOMING A DEALER.

Name_

Firm name

Street

A Complete Line for Every Purpose—and Every Unit a Profit-maker!

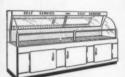




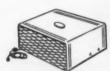
UPRIGHT FOOD FREEZERS



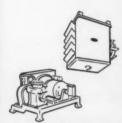
REACH-IN AND WALK-IN REFRIGERATORS



DISPLAY CASES



DEHUMIDIFIERS



CONDENSING UNITS AND COLD DIFFUSERS

How the Dorex "gas mask" principle assures FRESH refrigerator air



Refrigerator air controlled by the Dorex Food Saver is always sweet and fresh, constantly circulated. Food flavors don't "swap around." Temperatures stay uniform. Meat retailers save many dollars in trim losses. Food merchants save valuable storage space because all types of foods can safely be kept in the same cooler.

The Dorex Food Saver is compact and efficient . . . keeps coolers "sweet" with minimum cleanup expense. It quickly repays its low first cost—only \$49.50. Users everywhere are enthusiastic. Write today for full information.

W. B. CONNOR ENGINEERING CORPORATION

114 East 32nd Street, New York 16, N. Y.

IN CANADA:

Douglas Engineering Corporation, Ltd., 190 Murray St., Mentreal 3, P. Q.

---MAIL THIS COUPON TODAY!---

W. B. Connor Engineering Corporation, Dept. C-40 114 E. 32nd Street, New York 16, N. Y.

Please RUSH us full information about the Dorex Food Saver.

() We are interested for our own use.
() We want to know your dealer story.

Name.....

Address

A CURTIS Franchise BECAUSE CURTIS EQUIPMENT is MONEY N THE BANK

SELLS and STAYS SOLD AND YOU CAN HANDLE ANY ...

AIR CONDITIONING • REFRIGERATION • or AIR MOVING JOB

WITH THE COMPLETE CURTIS LINE

With the addition of new 2, 3 and 8-ton package type and 30 and 40-ton remote type air conditioners to the comprehensive Curtis line, the Curtis dealer is in his best position in history. Long known for their performance record, Curtis Packaged Air Conditioners are built to operate efficiently with minimum installation and maintenance costs.

Supported with big, colorful full page advertisements in the Saturday Evening Post, Time, Newsweek and many other consumer magazines, plus an assortment of powerful sales promotion helps, the Curtis dealer will find Curtis equipment is recognized and wanted by consumers everywhere.

CURTIS Refrigerating Machine Division

of Curtis Manufacturing Company 1915 Kienlen Avenue, St. Louis 20, Mo.

96 YEARS of SUCCESSFUL MANUFACTURING



Packaged Type



Ceiling and Floor Type Air Handling Units



Condensing Units V4 H.P. thru 40 H.P.



Central Type 10 and 15 tons



Evaporative Condensers, and Cooling Towers

Drier than the sahara

Refrigerants

Sulfun Dianide

ANSUL

Mithyl Cabride

ANSUL

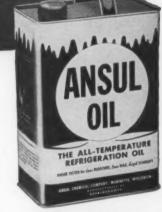
Rep. U.S. Parl. Off.

ANSUL OIL

DRYNESS is a critical requirement in the specifications of ANSUL Refrigerants and ANSUL Refrigeration Oils. To safeguard the dryness of Ansul Refrigeration Products, specially designed container-drying and product-dehydrating equipment is used to eliminate the last trace of moisture.

Moisture in refrigeration systems results in the formation of ice, rust, sludges, and contributes to the development of other impurities and complications. These seriously interfere with the proper operation of a refrigeration system.

ANSUL Technicians have prepared a series of bulletins on the effects of moisture and other foreign matter in refrigeration systems. Copies may be obtained from ANSUL wholesalers or by writing directly to Ansul Research.



ANSUL 150 OIL -

The All-Temperature Refrigeration Oil — is sold by leading refrigeration wholesalers everywhere. (If you require a higher viscosity oil ask for ANSUL 300.)

ANSUL CHEMICAL COMPANY REFRIGERATION DIVISION, MARINETTE, WISCONSIN



MODEL 306. The sensational open case with THREE refrigerated shelves. For profitable impulse sales.



MODEL 6710. 10-ft. long open front case with extra wide display shelf. Ideal for produce display.



MODEL 5710. Open Front self-service case for prepackaged fresh meats, praduce, or dairy products.



SERIES 100. Double duty models 6 to 12 ft. long. Also top display models In 10 and 12 ft. lengths. CREATES A
MOOD
FOR
FROZEN
FOOD



KOCH MODEL 1407 FROZEN FOOD CASE

You'll never get the cold shoulder when you sell this new KOCH Frozen Food Case. Ice Cream and frozen foods are UP within easy reach . . . to stop shoppers. Foods stay frozen hard, yet no wintry blasts chill the enthusiasm of grocers because the amazing new 3-way cooling principle keeps cold DOWN where it should be for maximum protection.

Superbly designed and brilliantly lighted to stand out in any surroundings, Model 1407 is a real volume-builder. And its remarkable efficiency keeps operating costs to a minimum. Here is another reason why the choice is KOCH wherever cold is sold. Get the facts on the complete KOCH line today.

SEE FOR YOURSELF HOW IT LOOKS . . . HOW IT WORKS . . . HOW IT SELLS!

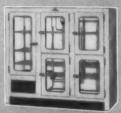
REFRIGERATORS

NORTH KANSAS CITY 16, MO.

THE QUALITY REFRIGERATOR LINE SINCE 1883



MODEL 3508. Wall Type Display Case. For selfservice display of dairy products or beverages.



MODEL 3865. A 65-cu. ft. reach-in refrigerator. One of the six popular Koch reach-in cabinets. KOCH REFRIGERATORS North Kansas City 16, Mo.

Please send me at once, without obligation, complete information on profit-making Kach Display Cases and Refrigerators.

Name____

Address

City_____ Zone____ State____

These successful servicemen

PROFIT FROM THE GOOD WILL **EARNED BY FRIGIDAIRE PARTS!**

Precision-built of finest materials, Frigidaire Service Parts are made to the same exacting quality standards as original equipment. That's why customers are better satisfied with work that's done with these parts. They know the job will be right the first time. And their confidence is justified by the results, for re-adjustments and call backs are greatly reduced when genuine Frigidaire Parts are used. It's easy to see why servicemen all over the country praise Frigidaire Parts for building the good will that means more customers and bigger profits.



Won't Let Customers Down

"My customers expect high quality and I don't let them down. I use the finest parts I can obtain-Frigidaire," says Paul Calvert, Calvert Electric Company, Manhattan, Kan.



Credits Frigidaire For Service Business Success!

"The good will resulting from use of genuine Frigidaire Parts has been a big factor in the success of our business," says Walter B. Paxton, Paxton's, Richmond Va. "The reliability, economy and ready availability of Frigidaire Parts all help build customer satisfaction.'



Frigidaire Refrigeration Oil Is The Finest Money Can Buy!

Specially refined to the requirements of Frigidaire engineers, Frigidaire Refrigeration Oil is precision-processed to remove all air and moisture-all traces of dirt, wax and gum-forming substances. It is inspected again and again to make sure it meets Frigidaire's high standards, and it comes to you sealed in spotlessly clean, air-tight cans. Your nearby Frigidaire Parts Distributor can supply you with this super-quality oil in 1 and 5 gallon sizes, and in viscosities suited for use with Freon, SO2 or methyl chloride refrigerants.



Insures Customer Satisfaction

"Our customers know they're getting the best in performance and dependability with genuine Frigidaire Service Parts," says Leo F. Carton, L. F. Carton, Inc., Boston, Mass.

FRIGIDAIRE

Service Parts and Accessories



FRIGIDAIRE DIVISION

General Motors Corporation

1434 Amelia Street, Dayton 1, Ohio. (In Canada, Leaside 12, Ontario) Please rush my free copy of your parts catalog—"Genuine Precision-Built Frigidaire Parts and Accessories."

Firm Name

Address _____

City _____ State _____

11

and AIR CONDITIONING . APRIL, 1950

For full information about all Frigidaire

Service Parts and Accessories, write today

for your free Frigidaire Parts Catalog.



Modern design gives today's refrigerators a greater food storage capacity in relation to overall cabinet size than was deemed possible just a few short years ago. Unit compartments have been reduced in size or eliminated entirely. Food compartments have been extended, in many cases substantially to floor level. Thus storage space has been increased by two or more cubic feet with no increase in exterior dimensions, and with but little added load on the compressor.

This remarkable achievement is made possible by the Tecumseh Compact. Due to its small size, the Compact may be installed in a smaller-than-usual unit compartment, mounted on the back of the cabinet, or placed in a "dimple" in the cabinet liner. When used with the new flue-type static condenser, food storage space is extended to the bottom of the refrigerator.

The tremendous popularity of the Tecumseh Compact is shown by the fact that more than 100,000 refrigerators equipped with Tecumseh Compact compressors were placed in homes in the first full year of production. Today, over 200,000 Tecumseh Compacts are in use in home freezers, beverage coolers and vendors, water coolers, complete kitchens, midget trailer and sports refrigerators, as well as many models of household refrigerators.

For Tomorrow's design in your refrigerator Today—specify the Tecumseh Compact. Write or wire for complete details.



TECUMSEH PRODUCTS COMPANY

TECUMSEH, MICHIGAN

EXPORT DEPARTMENT: 2111 WOODWARD AVE., DETROIT 1, MICH.

World's largest independent producer of compressors and condensing units for the refrigeration industry.



The Bell & Gossett Company believes that its products should give service—not require it! This insistence on quality is evident in your first glance at any unit of B & G Refrigeration Equipment. You'll find new and better design—rugged construction—painstaking workmanship—all combined to produce top efficiency in perform-

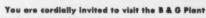
ance and longer service life.

The many refinements added to the basic soundness of B & G design reflect the skill developed in over a quarter century of making fine heat transfer equipment B & G Evaporators, Condensers, Heat Exchangers and Centrifugal Pumps assure you of that priceless asset—customer satisfaction!

Send for these catalogs

B&G Refrigeration Equipment is described and illustrated in these two catalogs. Complete engineering data is given, together with simplified selection procedures. Your copies will be sent upon request.





You'll be interested in seeing the modern manufacturing methods and precision workmanship which make B & G Hydro-Flo Products known everywhere for superior quality and performance



*Reg U. S. Pat. Off

Hydro-Flo REFRIGERATION EQUIPMENT

BELL & GOSSETT COMPANY Dopt, BL-45, Morton Grove, Illinois

POCKET-SIZE Costs only 447 15

measures current instantly without breaking circuit or insulation





Refrigeration and air-conditioning men who have already discovered the Amprobe agree: It's one of the most useful instruments they've ever owned. Here's why:

AMPROBE is so compact, you can actually slip it into your hip pocket, or carry it on your belt like a pair of pliers!

It's ½ the usual size (only 7") It's 1/3 the usual weight (only 14 oz.)

AMPROBE costs only \$42.75 - half the price you would expect to pay for such a dependable, precise splitcore volt-ammeter!

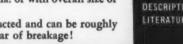


AMPROBE gives you an instant current reading "right on the nose" without touching the conductor or interrupting the circuit! (You just press the trigger to open the spring-controlled jaws; then release the

trigger to close probe jaws around the conductor.) AMPROBE measures two A.C. voltage ranges!

AMPROBE jaws are perfectly shaped for working on small motors. Only 3/8" clearance required! Will also handle conductors up to 11/8" dia. or with overall size of 11/4" x 11/2".

AMPROBE is ruggedly constructed and can be roughly handled on the job without fear of breakage!





The Amprobe has now been accepted as the development that takes the split-core voltammeter out of the "expensive heavy equipment" class and makes it a personal instrument worth its weight in gold to the man who has to travel fast and light.

Once you've held the Amprobe in your hand, once you've discovered how convenient it is to carry and to use, you'll understand why an Amprobe in the hip pocket is fast becoming the "trademark" of the refrigeration and air conditioning engineer and service man. Send today for Technical Bulletin. PYRAMID INSTRUMENT CORP., 49 Howard Street, New York 13, N. Y.

THE AMPROBE IS AVAILABLE IN THREE MODELS:

MODEL A-5 MODEL A5-1 AMPERES: 0/6.5/13/ 26/65/130 amps

AMPERES: 0/6.5/13/ 26/65/130 amps VOLTS: 0/130/260VAC VOLTS: 0/150/600VAC VOLTS: 0/150/600VAC

MODEL A-6 AMPERES: 0/10/25/ 50/100/250 amps

...........

FREQUENCY: 50-70 cycles VOLTAGE BREAKDOWN TEST: 3,000 Volts A.C. ACCURACY: ± 3% (of full scale deflection) SCALE LENGTH: 2.47 inches

SEND FOR DESCRIPTIVE LITERATURE

PYRAMID 49 Howard					C-4
Please ser Amprobe s	nd me split-cor	Bulletin e volt-am	109D meter.	describing	th
Name		**************			*****
Сомрану			***************************************		*****

................

Our lacel electrical distributer is

PYRAMID INSTRUMENT

see it, try it today at all better distributors

GENUINE COPELAND PARTS

You can buy 'em



California

Genuine Copeland parts are available at over

160 different locations. You can give prompt

service without large inventories. This is

another way Copeland gives you the kind of

cooperation that makes your job easier.

Write or wire for address of your nearest authorized parts jobber.



use genuine Copeland parts

COPELAND REFRIGERATION CORPORATION . SIDNEY, OHIO

Manufacturers of

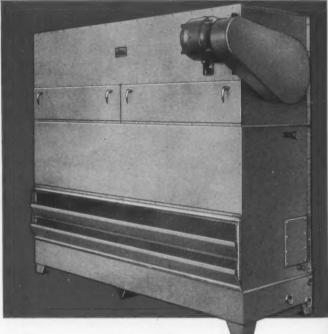
REFRIGERATION UNITS (OPEN-TYPE AND COPELAMETIC), WATER COOLERS, REFRIGERATORS

CONSERVE BUSH Cooling Towers

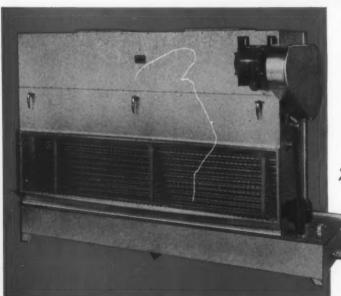


The tremendous publicity given the drought in New York City has focused public attention on water-consuming devices . . . has made doubly important the use of equipment which conserves our most important public resource.

For localities where water is scarce or costly . . . or water temperatures high . . . the logical solution is the Bush Cooling Tower which reuses water by cooling it after it leaves the condenser. The Bush Cooling Tower, in 3 to 75 ton capacities, is of the induced draft type . . . can be located anywhere in a building . . . and is equipped with centrifugal fans to handle an ample air volume through duct work for either intake or discharge.



BUSH Evaporative Condensers



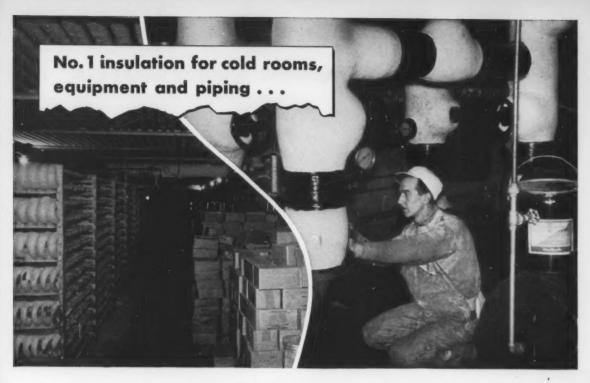
Soundly engineered and ruggedly constructed in 5 to 75 ton capacities with welded steel frame hot-dipped galvanized after fabrication. For easy installation all units are designed to minimum depth . . . or built in sections to facilitate moving through standard width doors. All inside surfaces and frame completely covered with bitumastic compound for additional protection against corrosion.

SEND FOR NEW 1950 CATALOG. Illustrates and describes the complete BUSH LINE ... with new engineering data to help you plan and specify.

Buy the Best-and the Best is Bush



BUSH MANUFACTURING CO. . WEST HARTFORD 10, CONN.



Outstanding for

- ... PROTECTION OF FOODS IN STORAGE
- ... EFFICIENCY AGAINST HEAT FLOW
- .. ECONOMY OF LONG SERVICE



BECAUSE ROCK CORK* is basically mineral in composition, it acts as a highly efficient barrier to the flow of heat... gives many years of trouble-free service. And, in service, it safeguards sensitive food products, because it is sanitary and odorless, is moisture resistant, and is immune to vermin.

Rock Cork is manufactured from mineral wool combined in production with an asphaltic binder. It comes in sheets, lagging and pipe insulation form. Rock Cork pipe insulations are further protected with an asphalt saturated asbestos felt jacket that protects the longitudinal joints and reduces the need for seam filling.

Use this skilled application service—You're sure to get the most from your insulation investment if you have your next job engineered and applied by a Johns-Manville contract firm. For further information, write Johns-Manville, Box 290, New York 16, N.Y.

SEND FOR FREE FOLDER

Folder IN-122A contains property tables and other important data on Rock Cork's advantages. Send for it today!



*Reg. U. S. Pat. Off



Johns-Manville

ROCK CORK

REFRIGERATION INSULATION

and AIR CONDITIONING . APRIL, 1950

WAGNER MOTORS ... The choice of leaders in industry

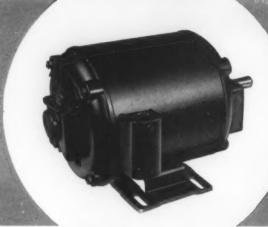
Here's what you get in the WAGNER TYPE RA MOTOR...

the most simplified design to provide -

repulsion start

HIGH STARTING TORQUE...for quick, easy starting and smooth acceleration.

LOW STARTING CURRENT... to minimize light flicker when motor starts.



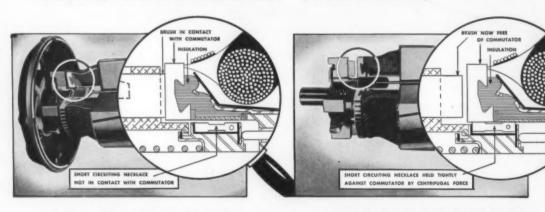
induction run

HIGH OPERATING SPEED... constant at all operating loads, even under everload.

FLAT EFFICIENCY CURVE... over a wide operating range.

Pioneered by Wagner more than half a century ago, the repulsion-start induction single phase motor is truly industry's "general purpose" motor because it combines the best features of two types of motors: the repulsion motor during the starting period and the induction motor while running at rated operating speeds. Today, the Wagner Type RA offers the most simplified, trouble-

free design available, and is still the standard by which all other single phase motors are judged. In the Wagner Type RA Motor you get low upkeep cost, minimum servicing, freedom from vibration and noise, and years of reliable service. Shown below are the basic principles of operation of this motor. Bulletin MU-185 gives complete details. Write for a copy.



Starting period—Short-circuling necklese is not in contect with commutator bars. A governor spring holds barrel in starting position. Brush assembly completes selected circuits enabling motor to start as a republion motor. Running period—Governor weights (actuating pushrods) have forced spring barrel forward until sheet-circuiting nockleac connects commutator bars to short-circuiting ring, forming a "squirrel cogo" to permit operation as an induction motor.



WAGNER ELECTRIC CORPORATION 6442 Plymouth Ave., St. Louis 14, Mo., U.S.A.

ELECTRIC MOTORS - TRANSFORMERS - INDUSTRIAL BRAKES AUTOMOTIVE BRAKE SYSTEMS - AIR AND HYDRAULIC

BRANCHES IN 29 PRINCIPAL CITIES



NO COUPONS NO BOX TOPS NO CATCHES

... GET IN THE CONTEST EARLY

The MECHANICS' JACK-POT is a different kind of contest. Absolutely no purchase is required to enter-no box tops, no coupons. (You don't even have to be an owner of Bonney Tools!) All you have to do is complete this sentence in 25 words or less:

"I PREFER BONNEY TOOLS BECAUSE . . . "

Your chance of winning is every bit as good as the next fellow's. Just read the rules, complete the entry blank attached to this ad, and mail it to MECHANICS' CONTEST, BONNEY FORGE & TOOL WORKS, P. O. BOX 831, ALLEN-TOWN, PA. The important thing is to send in your entry now.

READ THESE RULES CAREFULLY

- 1. The contest is open to all mechanics and mechanics' helpers in the continental United States.
- 2. The following are not eligible: employees of Bonney Forge & Tool Works and members of their immediate families; employees of any Bonney sales organization, distributor or jobber; employees of the Bonney Forge & Tool Works' Advertising Agencies.
- 3. All entries must be postmarked not earlier than March 1, 1950 and not later than May 31, 1950. Address your entry to: Mechanics' Contest, Bonney Forge & Tool Works, P. O. Box 831, Allentown, Pa.
- The entries will be judged for originality and aptness of thought.
 Duplicate prizes will be awarded in case of ties. The decision of the judges will be final. Entries will not be returned, and all become the property of Bonney Forge & Tool Works.

- 5. Contest winners will be notified by letter no later than June 30, 1950. Winner lists will be available on request to contestants who send in stamped, self-addressed envelopes.
- 6. Each contestant is limited to one entry. If more than one is sent in, only the first entry received will be considered.

YOU CAN WIN ONE OF THESE BIG PRIZES

First prize.....\$1000.00 Fourth prize....\$100.00 Second prize... 500.00 Fifth prize..... 50.00 Third prize.... 100.00 Sixth prize..... 50.00 Seventh prize. \$50.00

- . PLUS 100 prizes of \$15.00 Tool Purchase Certificates
- PLUS 400 prizes of \$11.00 Zenel Open End Wrench Sets
- PLUS additional prizes of Bonney Tie Clasps for the next 1000 best entries.

ENTRIES MUST BE POSTMARKED NOT LATER THAN MAY 31st



BONNEY FORGE & TOOL WORKS P. O. Box 831, Allentown, Pa.

MECHANICS' JACK-POT CONTEST

"I prefer Bonney Tools because.....

My Bonney Jobber is.....

In order to help your Bonney Jobber Salesman participate in this contest, ask him to help you with your entry statement and, if he does help you, enter his name here.....



BONNEY FORGE & TOOL WORKS

ALLENTOWN, PENNSYLVANIA



UNICON

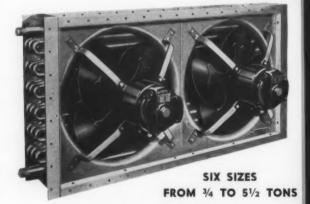
SELF-CONTAINED, REMOTE TYPE AIR-COOLED CONDENSER

by KRAMER

When to Use the UNICORN ...

- 1. To eliminate hot compressor rooms.
- 2. Where there is no water at all.
- 3. Where water is too expensive.
- 4. Where there is a sewage problem.
- 5. Where extra condenser capacity is required in an existing system.
- For combination air-and-water cooled systems in an existing water cooled system.

Send for Bulletin No. U-177



KRAMER TRENTON CO. Trenton 5, N. J.

THERMOBANK - COOLMASTER - RADIAL UNITS
PANEL UNITS - CUBERS - FINNED COILS BARE TUBE COILS - HEAT INTERCHANGERS
CONDENSERS Air Cooled, Water Cooled, Evaporative
WATER COOLING EVAPORATORS
BLAST COOLING COILS - BLAST HEATING COILS.



NO MOISTURE can get by this SEAL!

Revere puts the crimp on moisture in refrigeration and air conditioning lines with **DRYSEAL**

From one sealed end to the other you can depend on it that Dryseal Refrigeration Tube will be bone-dry. This is accomplished by dehydrating and subjecting the tube to precise, mechanical sealing at the factory. Moisture is out!

In making an installation the seal can be left unbroken until the connection is made, as the seal has the same diameter as the tube, and therefore, will pass through any opening large enough for the tube itself. Installation is extremely simple as the uniform dead-softness of Dryseal enables it to be bent by hand with little effort, You'll also find, when you flare Dryseal Tube for compression fittings, that it does not split on the end. This is because of the ductility and soft temper of the copper used.

Dryseal is made to new, more economicaldimensional standards with tube sizes from 1/8" to 3/4" O.D. It comes neatly packed in attractively designed carton making it easy to identify in stock. All of which makes for an easier, faster, trouble-free quality installation. Ask your distributor about Dryseal next time you order refrigeration tube. He has Dryseal and will give you prompt delivery.

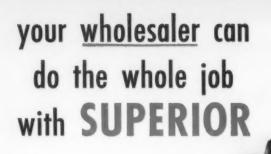
REVERE

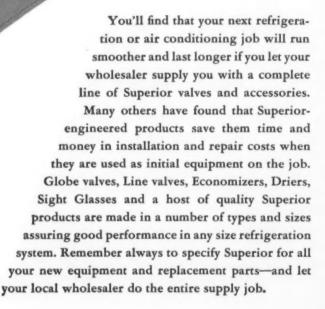
COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, New York

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; Los Angeles and Riverside, Calif.; New Bedford, Mass.; Rome, N. Y.—Sales Offices in Principal Cities, Distributors Everywhere.





Superior valve and fittings co.



LETTERS

Refrigeration Engineer Wanted For Service in Panama

EDITOR

The office of the Panama Canal advises that there is a vacancy in the position of Mechanical Engineer, Refrigeration, for duty in the Panama Canal service on the Isthmus of Panama. This position is in GS-12 at a salary of \$8,000 per annum, for a minimum temporary employment of 18 months, on a 40-hour week basis.

Free transportation to the Canal Zone is provided the appointee and his immediate family, as well as for his household

goods and personal effects.

Applicants must be graduates of colleges or universities of recognized standing and shall have had at least 10 years experience in the design of cold storage plants, three years of which shall have been in active supervision of and directly responsible for the design of large cold storage projects.

They must also be American citizens in good physical condition, and not over 45 years of age, this requirement being waived up to 62 years for persons entitled

to veterans' preference.

Those interested are urged to communicate with the "Chief of Office, The Panama Canal, Washington 25, D. C." for further details and application blanks.—B. F. Burdick, Chief of Office.

Wants Information On Automatic Ice Cuber

EDITOR:

We are interested in automatic ice cube makers, and will appreciate your sending us a list of the various manufacturers that we may contact.—E. A. Gustafson, Born Refrigeration Co., Atlanta, Ga.

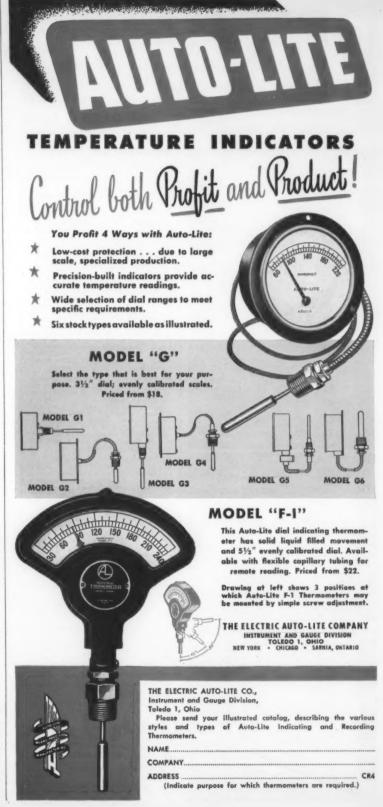
Following are manufacturers of automatic ice cube makers: Ajax Corp. of America, Chicago, Ill.; Belt-Ice Corp., Seattle, Wash.; Harley Corp., Columbus, Ohio; Ice-Flow Corp., Lonsdale, R. I.; Ice-O-Magic Corp., Minneapolis, Minn.; Refrigerated Equipment Sales Co., New York, N. Y.; Yogt Machine Co., Louisville, Ky.; York Corp., York, Pa.; Mills Industries, Chicago, Ill.; Loudon Mfg. & Sales, Inc., Minneapolis, Minn.; McQuay, Inc., Minneapolis, Minn.; Carrier Corp., Syracuse, N. Y.

Dealer Finance Plan

EDITOR:

We have recently read an article in your magazine regarding the Fogel finance plan. In connection with the matter of financing we feel that your subscribers may also be interested in our finance plan which we offer to refrigeration and air conditioning dealers.

Approximately 95% of our business is done with refrigeration dealers throughout the metropolitan area of New York. We



ordone... for Customer Satisfaction









A COMPLETE LINE

of the models most in demand by modern food merchants.

Priced Right and
PROTECTED BY THE MOST
LIBERAL WARRANTIES IN
THE INDUSTRY.

-from factory or local

distributor stocks.

M-17. Length 54". Height (less superstructure) 36". Depth 29". Capacity 625 standard packages. Also available in 9-12-26 Cu. ft. sizes. Stainless steel top and protective apron. Double THERMOPANE sliding doors—can be lifted out during rush hours. Illuminated superstructure optional. Hermetic unit on PULL-OUT tracks. Protected by TRIPLE WAR-RANTIES.

MODEL M-63. Length 6'3". Height 40\%", Depth 29". Capacity: Remote model—27 cases 12 az. bottles. Self-contained model—22 cases. Also available in 4'6" and 8'1" models. Stainless steel or Baked Metallic Green exterior. Heavy duty coil and blower. Pull-OUT hermetic unit on self-contained model. Available with factory assembled BLACK PANELYTE EXTENSION BAR TOP.

RCT-6. Height 42". Depth 33". Length 72" (remote)—96" (selfcontained). High-humidity, heavy duty fin cell acress tep. Porcelain mezzanine shelf. Triple Thermopane glass front. 4" Fibreglass insulation. All-welded steel construction. Booster cell in storage compartment.

RD-6. Length 72" Height 80".
Depth 30". Shelves—8 (adjustable).
Also available 96" leng. Heavy duty,
ceiling mounted, blower coil. Triple
THERMOPANE display glass. Brilliant
fluorescent lighting.

Other JORDON models-

- * CHEST FREEZERS 9-16-20-30 Cu. Ft.
- * UPRIGHT FREEZERS 18 Cu. Ft. * REACH-IN FREEZERS—White and Stain-
- * REACH-IN FREEZERS—White and Stainless—full range of models 23 Cu. Ft. to 60 Cu. Ft.
- ★ 2-TEMPERATURE REFRIGERATORS for domestic and commercial use. ★ FULL VISION CASES — 4 Ft. and 6 Ft.
- Lengths.
- * 3-DECK OPEN DISPLAY CASES.
- * SECTIONAL, METAL-CLAD, WALK-IN REFRIGERATORS—Normal and freezing

Write for Catalogs and Price Lists



Exclusive Export Distributor
CANNON & MILLER, 55 W. 42ND ST., N.Y.
Cable: CANANWILL

LETTERS

look mainly to the strength of the maker of the notes when deciding on the acceptance of the deal, which means that we will accept an unlimited amount of business from any one dealer providing that the customer passes our credit investigation. Our charge is 6% of the balance per year. We are also in a position to pass on credit within 24 hours from receipt of information on the account and will also aid the dealer in the drawing up of contracts, notes, etc., which papers are furnished by us to the dealer without any charge.

Should you feel that the above would be of interest to your subscribers, we would appreciate an article printed in your magazine at your convenience.—M. Lang, Conditional Purchase Co., New York, N. Y.

Vilter Also Makes Flake Ice Machine

EDITOR:

It is noted from your February issue that the Burgess Appliance Co., Nacogdoches, Tex., is interested in a unit to manufacture 5 tons of ice per day. In publishing the letter from this company, we note you have listed a number of our competitors, but not the Vilter Manufacturing Co.

We have manufactured our PakIce unit for about 17 years and it has found grand acceptance in all industries requiring ice in crystal form or as briquette. The crystal form PakIcer is built in three sizes, 1, 3½ and 6 ton per 24 hours and in the horizontal type, capable of producing ten to thirty tons per unit, either as crystal form or briquettes.

It is my pleasure to enclose a copy of our Bulletin #913 describing the vertical unit.—A. O. Vogel, Vice-President, Sales, Vilter Mfg. Co., Milwaukee, Wis.

Our apologies for the oversight. We have passed this information along to the inquirer.—Editor,

700-TON PLANT COOLS CONCRETE FOR DAM

Lewis Refrigeration & Supply Co., Seattle, Pacific Northwest representative of the Frick Co., has been awarded a contract for construction of what C. L. Spoonhour, manager, says is "one of the largest and most unusual refrigeration plants of its kind."

The cooling plant having a capacity in excess of 700 tons refrigerating effect, is being furnished to Consolidated Builders, Inc., of Mill City, Ore., and will be used mainly for temperature control of placed mass concrete in the construction of Detroit Dam, located on the Santiam river near Detroit, Ore.

What the serviceman should know about VIRGINIA REFRIGERATION products

To Charge a System,
Use Refrigerants
That Are
Consistently Pure,
Consistently Sure...

"EXTRA DRY ESOTOO" (B.P. 14°F.)

"Extra Dry" is the refrigeration grade SO₂ that service and maintenance engineers have endorsed for more than 20 years. Comes in all popular cylinder sizes.

"V-METH-L" (B. P.-10.7°F.)

Virginia Methyl Chloride is made specifically for refrigeration use. Low moisture content, low acidity and narrow boiling range recommend "V-Meth-L" for the most exacting requirements.

"FREON" REFRIGERANTS

"FREON-11"

"FREON-12"

"Boiling Point" 74.7°F.

"Boiling Point" —21.6°F.

"FREON-22"
"Boiling Point"
—41.4°F.

"FREON-113"
"Boiling Point"
117.6°F.

"FREON-114"
"Boiling Point"
38.0°F.

Virginia Smelting Company is distributor for Kinetic's "Freon" Refrigerants.

HOW TO STOP DRIPPING PIPES

The annoyance of constantly dripping suction lines, circulating cold water pipes, valves and fittings can be stopped—permanently—with Presstite Insulation Tape. It comes in 2"-wide rolls, ½" thick. Presstite Insulation Tape contains 40 percent virgin cork and will adhere to any surface. Joints are self-sealing. The convenient package contains 30 lineal feet. It's good policy to use Presstite Insulation

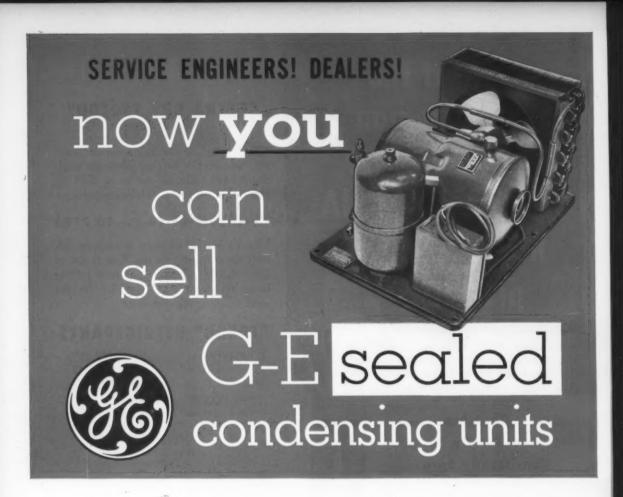
Tape on all new and reconditioned installations and stop customer dissatisfaction before it can start.

ASK YOUR WHOLESALER OR WRITE VIRGINIA SMELTING

C O M P A N Y

PHILADELPHIA • NEW YORK • BOSTON
CHICAGO • DETROIT • ATLANTA





YES, GENERAL ELECTRIC DEALS YOU IN ON THE NEW HERMETICS BUSINESS!

Now you can sell both open and hermetically sealed condensing units. Now you can replace sealed units in the field with reliable, long-lasting G-E hermetics. Now, too, you can obtain G-E hermetics for installation in new refrigerated cabinets. There's money for you in the hermetics field.

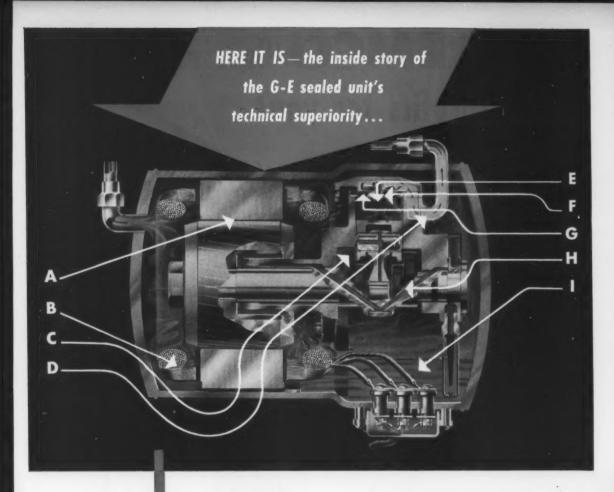
GET YOUR FULL SHARE!



GENERAL



ELECTRIC



YOURS TO SELL

The G-E condensing unit line—at G-E Parts Depots NOW

- G-E sealed condensing units and replacement parts
- G-E open units, 1/4 to 10 HP
- Replacement parts and replacement compressor bodies for units from 1/4 to 75 HP
- Compressor bodies with flywheels and service valves from 1/4 to 10 HP

More Refrigeration per Electrical Dollar—because

Less waste piston effort through high volumetric efficiency.
Low clearance volume—A
Thin valve plate—B
Low friction, large area valve ports—C

Long, Dependable Operation—because

Pressure-regulated forced feed lubrication.

Sure constant oil supply to all moving parts—D

No foaming or agitation—E

Suction gas cooling for long motor life—F

G-E motor has Formex wire——insulation is impervious to all and refrigerant—G Factory-tested for leaks with super-sensitive instruments.

Runs Quietly and Smoothly-because

Counterbalanced crankshaft—H
Discharge gas muffler cuts noise level—1

Complete Range of Models

G-E hermetics are designed to fit the requirements of most refrigerated cabinets. 2 shapes, square and rectangular, with or without receiver. 4 horsepower sizes— 1/6. 1/4. 1/5. 1/2



free INFORMATION ON G-E SEALED AND OPEN UNITS

MANUFACTURERS! When you buy sealed and open units, deal directly with your local General Electric Parts Depot. Investigate now the services your local G-E Parts Depot has to offer you. G-E nationwide Parts Depots make it possible for you to do business on a national scale, regardless of your size. And your distributors and dealers no longer have to tie up funds in costly inventories.

mail this coupon today!

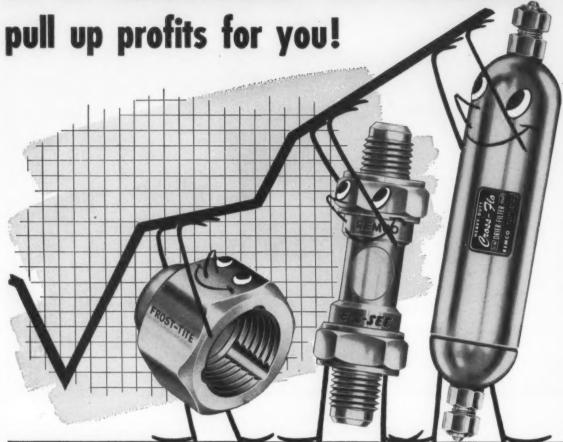
General Electric Company, Section CR4, Air Conditioning Department, Bloomfield, N. J.

Please send me your new specification sheet on the G-E sealed condensing unit, plus your condensing unit and replacement parts catalogs.

I am a service engineer dealer manufacturer contractor

NAME	
COMPANY	
ADDRESS	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
CITY	ZONE STATE

Let the REMCO "loss eliminators"



FROST-TITE eliminates losses from loosened and cracked flare nuts —

In Frost-Tite flare nuts, forged frost-relief slots provide relief for expanding ice within the nut, and thus no force is created to cause loosening, splitting, or cracking. Cost no more than ordinary flare nuts—are ideal for use anywhere in the system.

E-Z-SEE eliminates losses from leaking liquid indicators—

With E-Z-See, you are assured of the following definite advantages: (1) E-Z to see thru—both sides of the body are open to let in light (2) Positively leakproof—can't leak because springs automatically maintain just the right force to form a positive seal around the glass (3) Perfectly Safe—glass is protected for safety at pressures up to 500 psi.

Cross-Flo eliminates losses from clogged driers and expansion valve freeze-ups —

Now with Molded DuCal Drierite as the drying agent, you get the highest-possible efficiency even at liquid temperatures up to 150°. You can now count on prevention of refrigerant control freeze-ups even in the lowest temperature installations.

— Send for Literature and Prices —

Be sure to specify REMCO "Standard-Duty" Driers as the ideal low-cost quality driers for field applications and original equipment. Available with Molded DuCal Drierite or Silica Gel.

CARRIED IN STOCK BY LEADING WHOLESALERS EVERYWHERE

West Coast warehouse stock at: 2103 So. San Pedro, Los Angeles, Calif. EXPORT DEPARTMENT: Melchior, Armstrong, Dessau—Ridgefield, N. J.

REMCO
INCORPORATED
ZELIENOPLE, PENNSYLVANIA



... of course, it's Electric!

SELL THE LEADER... SELL WESTINGHOUSE!

Deluxe Water Cooler
BUILT RIGHT...PRICED RIGHT
...Amazingly Free From Service!



With the Westinghouse Stream-Height Regulator this can't happen...you always get a drink, never a squirt or a drip.



With the Westinghouse Stainless Steel Top there's no chippage problems. It's sanitary . . . easy to clean . . . and beautiful.

Never a shower bath... the Westinghouse Automatic Stream-Height Control holds the water flow constant, regardless of variations in local water pressure. This is a standard feature on Westinghouse Pressure Coolers. You can always get a drink, never a dribble or a squirt in the eye. That's another reason why folks like Westinghouse Water Coolers.

In addition, they like the Stainless Steel Top, the convenient Foot-Pedal Control, the Anti-Squirt Bubbler and a Push Button Bubbler Kit*. Westinghouse, and only Westinghouse has them all... PLUS a 5-Year Guarantee Plan. So it's Sell Westinghouse! Sell the Leader! Nine models, including 2 Compartment-Type Coolers... a capacity and type for every need.

*Available at slight additional cost

WESTINGHOUSE ELECTRIC CORPORATION
Appliance Division • Springfield 2, Mass.

you can be SURE..if it's Westinghouse

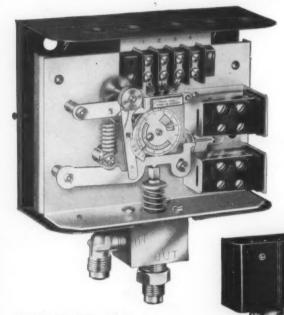


With the Westinghouse Foot-Pedal Control you're never frustrated by situations like this. No hands . . . just step on the pedal to get a drink of refreshing, cool water.

	formation call your Westing- tor or mail the coupon below:
Name	
Street	
City	
State	

AUTOMATIC HOT GAS DEFROSTING





Interior of the single unit Series 321 showing synchronous timer, heavily spring-loaded valve, two-pole snap-acting contact structures and ease of wiring. PENN's Series 321 Hot Gas Defroster is a "natural" for every food market. There's never been anything like it. It keeps evaporator coils frost-free . . . and does it *automatically!* It's wanted by refrigeration users everywhere because it keeps systems at peak efficiency . . . saves time . . . saves trouble . . . saves food . . . protects profits.

Evaporator coil defrosting... with Series 321... is fast and positive. At regular intervals, hot gases are pumped directly from the compressor through the evaporator coil. It eliminates objectionable rise in product temperature. And cost of installation and operation is low!

You get new profit opportunities with the Series 321 Hot Gas Defroster in a large untapped market. It's easy to install on frozen food cabinets, meat cases, etc., either blast coil or gravity jobs. Learn more about it... ask your wholesaler or write Penn Electric Switch Co., Goshen, Indiana. Export Division: 13 E. 40th Street, New York 16, U.S.A. In Canada: Penn Controls, Ltd., Toronto, Ont.



AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, PUMPS, AIR COMPRESSORS, ENGINES, GAS RANGES



Job Openings: For Men Only

BECAUSE Warren Cooler Corp.,
Atlanta (Ga.) manufacturer of commercial refrigeration equipment, likes to train its own executive personnel from the ground up, not a

single woman is employed in the plant. Men handle every job from switchboard operator to sales executive.

Vice president J. D. Harris, an ex-stenographer himself, is quick to state that the company has nothing against women-as such-but explains that the firm likes to use these more routine jobs as a training ground for future executive personnel. "Every key man in the Warren plant today," he declares, "began either as a secretary, stenographer, file clerk, or switchboard operator. They learned the business on the ground floor."

Cooling for Art's Sake

REFRIGERATION was used recently to safeguard \$80,000,000 worth of art masterpieces on their way from Austria to the National Gallery of Art in Washington. Loaned

by the Austrian government, these treasured paintingsincluding canvases by Rembrandt, Reubens, Van Dyke, and Titian-were transported in the refrigerated hold of the U.S.S. Malabar.

In an effort to prevent any deterioration or damage from bad weather or voyage conditions, humidity in the hold where the paintings were stored was held at about 70% and temperature at about 65 F.

Drive-Ins Can Be Air Conditioned

MANY drive-in theater operators are surprised to learn that outdoor movies can be air conditioned, but actually from an engineering standpoint the problem is quite

simple, writes Carl Boester in a recent issue of Heating &

Ventilating. Here's how it works:

An underground pipe system is installed under the entire parking area. At each parking station, a small coil and blower unit quite similar to the ordinary automobile heater is installed at the base of the speaker post. Connected to this unit is a flexible tube which discharges the conditioned air into the automobile; 100% filtered outside air is used. This conditioned air is discharged into the car and exhausted by opening a window very slightly.

In summer, chilled water is piped to each of the coil and blower units. This permits the cooling the dehumidi-

fying of the air circulated to each automobile. The chilled water is provided from a storage tank in which is submerged an appropriate system of refrigeration coils. These coils are connected to a small refrigeration machine which operates 24 hours a day producing and storing enough ice and chilled water to handle the entire evening cooling load.

USDA Bulletin Analyzes Frozen Food Marketing

FROZEN FOOD marketing is described and analyzed in a publication recently released by the U.S. Department of Agriculture's production and marketing administration.

The report, titled, "Marketing Frozen Foods-Facilities and Methods", deals with frozen food storing, transportation, distributing, merchandising, and the role of processing plants, locker plants, and home freezers in the frozen

food industry.

The report points out that several basic problems still need to be solved, although rapid growth admittedly has been made. More refrigerated storage space for wholesalers, better, low-cost transportation, more adequate storage at the retail level-these are some of the needs cited in the USDA publication. Copies are available from the Information Branch, Production and Marketing Administration, U. S. Department of Agriculture, Washington 25, D. C.

THE "HOW AND WHERE" OF FOOD STORES

THIS issue, devoted to profit possibilities in the Food Store Field, is the first of three special issues that will tell dealers and salesmen "How and Where" they can merchandise their equipment most effectively in various markets.

On the pages that follow you will find articles describing the sales methods used by dealers who do an outstanding business in the food store field; tips on the types of equipment food stores need and use; a successful contract service plan; and other information emphasizing the importance of this field in your 1950 profit picture.

Our "Business and Industry" issue next month will feature profit possibilities in selling air conditioners and water coolers. Look for it!

Bakeries and The Frozen Food Market A SURVEY of the market for frozen bakery products has recently been instituted by Lloyd R. Wolfe and Associates, Chicago business consultants firm. One question the survey

hopes to answer is: "Will popularity of frozen foods and attendant economies in packaging and distribution provide potential volume and profit for the baker?"

Another is: "Have failures in frozen bakery products been due to lack of quality, problems of packaging, careless transportation, faulty storage or inadequate display?" The survey will attempt to assay the rate of growth and potential size of the frozen foods market, the baker's rightful share of that market, and how he can secure it. It will also try to establish fundamental facts concerning the manufacture, packaging and distribution of frozen bakery products.



THESE SALESMEN



Lee Hayes, head of a Detroit food market refrigeration firm, offers Elia Najor, one of his customers, the benefit of his many years of experience by pointing out to him how he can improve one of his store's displays. It is this kind of "knowhow" assistance which Hayes instills in his salesmen in place of high-pressure product pushing. ON'T train your salesmen to sell your equipment. Instead, train them to show each customer and prospect how he can improve his own business operations—and his profits—through the use of this equipment. Thus, by making possible larger profits for your customers, you also ensure larger profits for yourself."

That, in a nutshell, is the salesproven merchandising philosophy of E. Lee Hayes, president and general manager of Detroiter Refrigerator Mfg. Co., Detroit (Mich.) distributor of Hussmann food market refrigeration equipment.

You might call Lee Hayes a sort of "Chick Sale" of the commercial refrigeration business. That is to say, he's a "specialist"—in the purest sense of the word. His firm sells only to the food retailing trade, and handles nothing but equipment designed for the preservation, storage, display, and merchandising of food products.

Hayes is a veteran of this business. He has been selling commercial refrigeration equipment in and around Detroit for more than 20 years, having started 'way back in the days of ice-cooled cases. And all this time he has been an ardent student of food merchandising. As a result of these years of experience and study, he knows a lot more about the food retailing business today than many of the market owners who are his customers.

Hayes is not a bit hesitant about admitting this fact. But more important is the fact that his cusomers recognize it, too. Consequently, they

PUSH PROFITS, NOT PRODUCTS

usually are more than willing to listen to any suggestions that he (or his salesmen) may make.

The worst possible approach a salesman in this business can use, Hayes firmly believes, is to walk into a prospect's store with this thought in mind: "How many pieces of equipment can I sell to this merchant?"

What that salesman really should do if he wishes to produce top results, Hayes points out, is walk into that same store thinking: "What can I do to help this merchant improve his business and increase his profit?"

This kind of "intelligent selfishness," Hayes knows from his own years of experience, really pays out

Continued on page 68

More like a supermarket than a commercial refrigeration dealership is the appearance of this display window of Detroiter Refrigerator Mfg. Ca. during its annual "Food Fair". This similarity is evident throughout the firm's entire display orea, which is filled with a complete range of equipment, all well-stocked with actual food products.



Feature of Detroiter's most recent food clinic, staged in conjunction with Associated Food Merchants of Greater Detroit and American Meat Institute, was the presentation of "Miss Equipment". On stage, in the usual order, are: Ted Shalman, Detroiter salesman; George Schleicter, president of the food merchants' organization; Lee Hayes, Detroiter's president and general manager; Miss Equipment; and Jack Milton, of the meat institute, one of the featured speakers.



Detroiter's external house organ, filled with experience stories of Detroiter-equipped markets, gives old customers e pat on the back and stimulates interest among the carefully selected prosments to whom it is sent.



CONTRACT SERVICE

DOOR-OPENER FOR SALES

70UR service department can help You sell more refrigeration equipment to food stores-if you give it a chance to go to work for you. And one of the most efficient ways in which it can work for you is through a contract service plan.

For contract service works on the

long-established principle-when you swing it around for use as a selling tool-that your best prospects for new business are the customers you already are serving . . . or, in this case, servicing.

Let's take a look at some of the advantages of a contract service plan from the dealer's standpoint:

1. It enables him, through his service department, to contact food store operators at frequent and regular intervals.

2. It gives him a line on the store's refrigeration equipment-its make, age and condition. He knows when

ENGINEERING AND R	- ATION INC.
tarn D	EFRIGERATION, IN
ENGINEERING AND R	Cin 6 N. I
ENGINEERIN Ave.	ency city of an
36 Dalidam	
	Paradelphia 4, Pa
Juney City, M. 3.	
Please 1-4300	9323 Channel SVergroun 6-4744
Business Must Press New York—Batter 3-1716 Press New York—Batter 3-1716 Press and Helders—Delauser 3-4316 Obl.Y	
Phone Prom New York 5-4316 Obd. x	TOTAL
Business Hear Phone New York—Batter 2-1774. Phones New York—Batter 2-1774. Phones New York—Batter 2-1774. Phones Phones and Halidays—Delaware 3-4316 OMEX	JAMANY THE STREET STREET STREET STREET STREET
REFRIGERATION	Tormany referred to at the
55.0.409	City, N.).
This agreement made and entered into test. between Engineering & Radrigeration, Inc., 56 Baldwin between Engineering & Rose Lown Food Marketta. Service Company and Home Lown Food Marketta.	Nome towns Pag
Engineering & Merrigon Food Marketa	Horis someth all parts,
Company and Home Contract.	from date of this agreement to manected to them
Service for referred to as the Control of 12	months following described units and the someting of the someting of the
Company agrees for a person opera	tion of thich would necessitists the mosths.
of rinerant, oil and labor necessary integral part of the l	Mont towns. Pa.s. months from date of this agreement to forminh all parts, months from date of this agreement to forminh all parts, months from the forming described units and only connected to them the form of the forming of the simplement or months. months from the forming of the simplement or months. display cases = 2 extra valves!
(except where the evaporation (except where the bring tank to repair it) also to give particularly	energting 3 display
The Service Company agrees for a pour- proper operation and labor necessary for the proper opera- ering the proper operation is an integral part of the fi- (except where the everporator is an integral part of the the opening of a brine tank to repair it also to give per- thar opening of a brine tank to repair it also to give per- thar opening of a print of Company 28. Elevatoric comits.	Self-service case;
1 - 1 HP AV MONEY unit open	using order would occurate us monophic of college control of college c
1 - 3/L HP AC Universal writ oper 1 - 3/L HP Brunner unit operating N	leber frosted food care
a up prupper unit operating	The state of the s
1 - 1 M. Da willess	COMPANY OF THE THE PARTY CONTROL OF THE PARTY CONTR
- Annie College Colleg	The black
	of this agreement is to give us
The state of the s	present by the Customer that the purpose of this agreement is to give the Service are the Service and while the Service that the Service
of the Service Company and so under	erstood by the Customer that the purpose of this agreement is to give use sent refrigerating equipment as specified herein, and while the Service sent refrigerating equipment is in distinctly understood that the Service
It is the instead of the Sarvice Company and so under the instead of the instead of the Sarvice Company and so under the instead of the instead	revision by the Customer that the purpose of this agreement is to give un- sent refrigerening equipment as specified herein, and while the Service set of service being required, is definedly understood that the Service harding roperly diamage or inhality.
Company agrees to give proposability for last of the	restood by the Contoners that the purpose of this agreement is to give the sent refrigerating equivorum as specified herein, and while the Service and of service being reasons of indirectly understood that the Service chandles, property dames or lindiving the service and the service of the
Company agrees to go responsibility for loss of company	for the shows measurement the payments as agreed,
Company agrees to go responsibility for loss of company	for the shows measurement the payments as agreed,
Company agrees to give a companishing for has a Company assumes no responsibility for has a The Customer agrees to pay the Service Company to specified in lower left hand corner. Should the so specified in lower left hand corner.	for the showe measurements as a ground. Continuer fail to make the payments as a ground, continuer fail to make the payments as a ground, continuer fail to make the continuer.
Company assures so responsibility for loss of Company assures so responsibility for loss of The Contoner agrees to pay the Service Company The postorier agrees to pay the Service Company so specified in Jorest left band corner. Should the minuted by the Service Company without written as minuted by the Service Company without written as	for the shower measurements on agreements an agreement of the continuer fail to make the purposents an agreement of the Continuer fail to make the purpose of the continuer for the continuer fo
Company assures so responsibility for loss of Company assures so responsibility for loss of The Contoner agrees to pay the Service Company The postorier agrees to pay the Service Company so specified in Jorest left band corner. Should the minuted by the Service Company without written as minuted by the Service Company without written as	for the shore measurements on agreements as agreements of continuer fall to make the payments as agreement of the Continuer fall to make the payments and to permit the employees of the seffigurating continuer from subolary and to permit the employees of the seffigurating continuer for the seffigurating continuer for the seffiguration of the continuer for the sefficient fo
Company agrees to give expensibility for issue or accommendation for issue or company. The Contours agrees to specific for a separated in force in faith hard corner. Should have a specified in force in faith hard corner. Should have not seen to be a specified in force in faith hard corner. Should have not seen to be made without a minimal by the Service Company when when the protect the service Company store to the promises at any tis basic Company store to the force and the protect that the protect of the service Company store to the force of the service Company store to the service Company store to the service Company store to the service Company to the service to the service Company store to the service	for the above measurement, and agency, and the control was a green, and the control was a special to make the payments as agency, and the control was a special control was a sp
Company agrees to go emponsibility for last or of company agrees to go emponsibility for last or of company. The Contractive agrees left hand corner. Should fee as specified the Service Company without written to minimal by the Service Company without written to minimal by the Service Company without written to minimal by the Service Company without the company and the service of the service Company with the service Company and the pool of the Service Company who pool of th	for the abover measurement of the control of the co
Company agrees to go emponsibility for last or of Company agrees to go emponsibility for last or of property. The Contract agree of the contract as specified agree left hand corner. Should the as specified by the Service Company without written or minimal by the Service Company without written or The Contract furthermore agrees to protect the Service Company scores to the premisest set price if Service Company scores to the premisest set price to Service Company scores to the premisest set price to Service Company scores to the premisest set price Service Company scores to the premisest set price to Service Company scores to the premisest set price to Service Company scores to the premisest set price to Service Company score to the price Service Company score to the price Servi	for the abover measurement of the control of the co
Company agrees to any emponsionality for last our company agrees to any emponsionality for last our company. The Contours agreed to the company of the Contours agreed to the company within a company of the company of	for the shown mississed the purments at agreem. Cantinuer fail to busine the purments at agreem. The continuer to the continuer to the continuer to the continuer to the continuer for the continuer to the cont
Company agrees to any emponsionality for last our company agrees to any emponsionality for last our company. The Contours agreed to the company of the Contours agreed to the company within a company of the company of	for the shown manuscript the purposents at agreem. Cantinuer fail to make the purposents at agreem. For a continuer to the Continuer. For a continuer to the continuer to the continuer further than the continuer further than the continuer to the continuer to the continuer further than the continuer to the con
Company agrees to go emponsibility for last our company agrees to go emponsibility for last our company. The Contoner agrees to go per the Service Configuration of the case speedie the Service Company without writtens on The Contoners furthermore agrees to protect the Three Company secrets to the premises at any time for the Configuration of the Contoners furthermore agrees to protect the Service Company without the protect Company of the Contoners Configuration of the Contoners Contoners and the Contoners Cont	for the short measurement of the proposal as agreed, and the Continuer fall to make the pursuants as agreed, and the Continuer fall to make the pursuant form substage and to pursuit the sumpleyers of the refiguration continuers to the pursuant form the Continuer further me the deed, solution such requirement, unancessary expense, are maintenance on continuers to the pursuant of the pursuant to the pursuant of t
Company agrees to go emponsibility for last our company agrees to go emponsibility for last our company. The Contoner agrees to go per the Service Configuration of the case speedie the Service Company without writtens on The Contoners furthermore agrees to protect the Three Company secrets to the premises at any time for the Configuration of the Contoners furthermore agrees to protect the Service Company without the protect Company of the Contoners Configuration of the Contoners Contoners and the Contoners Cont	for the short measurement of the property of the control of the break property of the control of the break property of the control of the break property of the control of
Company agrees to go emponsibility for last our company agrees to go emponsibility for last our company. The Contoner agrees to go per the Service Configuration of the case speedie the Service Company without writtens on The Contoners furthermore agrees to protect the Three Company secrets to the premises at any time for the Configuration of the Contoners furthermore agrees to protect the Service Company without the protect Company of the Contoners Configuration of the Contoners Contoners and the Contoners Cont	for the short measurement of the property of the control of the break property of the control of the break property of the control of the break property of the control of
Company agrees to go emponsibility for last our company agrees to go emponsibility for last our company. The Contoner agrees to go per the Service Configuration of the case speedie the Service Company without writtens on The Contoners furthermore agrees to protect the Three Company secrets to the premises at any time for the Configuration of the Contoners furthermore agrees to protect the Service Company without the protect Company of the Contoners Configuration of the Contoners Contoners and the Contoners Cont	for the short measurement of the property of the control of the break property of the control of the break property of the control of the break property of the control of
Company agrees to go emponshibility for land use of Company seasons no go emponshibility for land use of Company seasons of the Company of th	for the short measurement of the proposal as agreed, and the Continuer fall to make the pursuants as agreed, and the Continuer fall to make the pursuant form substage and to pursuit the sumpleyers of the refiguration continuers to the pursuant form the Continuer further me the deed, solution such requirement, unancessary expense, are maintenance on continuers to the pursuant of the pursuant to the pursuant of t
Company agrees to go emponshibility for land use of Company seasons no go emponshibility for land use of Company seasons of the Company of th	for the short measurement of the proposal as agreed, and the Continuer fall to make the pursuants as agreed, and the Continuer fall to make the pursuant form substage and to pursuit the sumpleyers of the refiguration continuers to the pursuant form the Continuer further me the deed, solution such requirement, unancessary expense, are maintenance on continuers to the pursuant of the pursuant to the pursuant of t
Company agrees to go emponshibility for land use of Company seasons no go emponshibility for land use of Company seasons of the Company of th	for the short measurement of the proposal as agreed, and the Continuer fall to make the pursuants as agreed, and the Continuer fall to make the pursuant form substage and to pursuit the sumpleyers of the refiguration continuers to the pursuant form the Continuer further me the deed, solution such requirement, unancessary expense, are maintenance on continuers to the pursuant of the pursuant to the pursuant of t
Company agrees to go emponsibility for land using the Company agrees to go emponsibility for land using The Contenter agrees left hand corner. Should not a speedfed the Service Company without written as the state of the Service Company without the Service Company with the Serv	for the abover measurement of the proposed of the continuer fail to make the pursuants at agreem. Continuer fail to make the purposed of the continuer fail to make the purpose of the continuer for the continue for the continuer
Company agrees to any emponsishing for land using Company assurance to purpose the Service Company within contract the Sacrice Company assurance to present the Sacrice Company assurance to present the Sacrice Company assurance to call the form of the Company when to the Company when to the Company when to the Company when the Company when the Sacrice Company assurance to call the form one consumption to the Company when the Company when the Company as the Company when the Company when the Company of the Company when the Company of the Company when the Company of the Company o	for the abover measures of the purposents at agreem, cutcation to the Continuers. Continuers fall to braid the purpose of the continuer to the Continuers of the Continuer for the Continue for the Continue for t
Company agrees to go emponsibility for land or company agrees to go emponsibility for land or company. The Contoner agree to go peed to general contoner agree to the land corner. Shall for an speedie the Service Company without written as the contoner furthermore agrees to protect the ferries Company section to the premise at any in Service Company agrees to the premise at the protect of the company agrees to the premise at any in Service Company agrees and the service Company of the company of the protect of t	for the abover measures of the purposents at agreem, cutcation to the Continuers. Continuers fall to braid the purpose of the continuer to the Continuers of the Continuer for the Continue for the Continue for t
Company agrees to go emponsibility for land or company agrees to go emponsibility for land or company. The Contoner agree to go peed to general contoner agree to the land corner. Shall for an speedie the Service Company without written as the contoner furthermore agrees to protect the ferries Company section to the premise at any in Service Company agrees to the premise at the protect of the company agrees to the premise at any in Service Company agrees and the service Company of the company of the protect of t	for the abover measures of the purposents at agreem, cutcation to the Continuers. Continuers fall to braid the purpose of the continuer to the Continuers of the Continuer for the Continue for the Continue for t
Company agrees to go responsibility for land using the Company assurance for the Company assurance for the Company assurance for the Company assurance for the Company without a specific the Service Company without services to The Vision Company second to the Company without the Company with the Company of Company's regular mechanism can see that the Company with the Company of Company's regular mechanism for some services of Company's regular mechanism for some services of the Company of Company's regular mechanism for some services of the Company of	from the aboven measurement of the programment as agencies, cultured fall to make the purposents as agencies, cultured fall to make the purposent controlled for the
Company agrees to go emponsibility for land or company agrees to go emponsibility for land or company. The Contoner agree to go peed to general contoner agree to the land corner. Shall for an speedie the Service Company without written as the contoner furthermore agrees to protect the ferries Company section to the premise at any in Service Company agrees to the premise at the protect of the company agrees to the premise at any in Service Company agrees and the service Company of the company of the protect of t	for the abover measurement as agreed, continued fail to brade the purments as agreed, continued fail to brade the purments as agreed, continued fail to brade the continued fail to be continued for the continued fail to be continued to the continued fail to be continued for company fail to except for the continued fail to be continued continued fail t

When a food market operator enters into a service arrangement with Engineering and Refrigeration, Inc., he signs a contract like the one shown at left. This "sample" contract has been filled out to show how the equipment is listed and the schedule of payments arranged. Contracts for smaller amounts may be paid up in fewer in-stallments, at the customer's convenience. Shown below is the sticker used by the company on all its service jobs. Note line calling attention to the contract service plan, and spaces for entering dates when service inspections were made.

24	HOU	IR	SERV	ICE
	Dhoos	EV	6-h7hh	1

ercial Refrigeration Serviced ALL MAKES

ENGINEERING & REFRIGERATION, Inc.

3325 CHESTNUT STREET • PHILADELPHIA A, PA.
Distributers of
HUSSMANN—Refrigeration Cases for All Food Store Nords
CARBER—Refrigeration and Air Conditioning

CHECKED						
	PLACE	TIME HE	AR YOUR	TELEPH	Divis	



additional equipment is needed, when present equipment should be replaced.

3. His service man, knowing the food store operator, can do some preselling and make the salesman's job easier.

4. Contract service helps to "balance out" the service department's operation. Periodic inspection helps spot possible major repair needs, which can be made during winter months, when service business normally is lighter.

This Plan Is Tailor-Made

Engineering and Refrigeration, Inc., distributor of Hussmann equipment in the Philadelphia territory and a branch of the Jersey City firm of the same name, uses a contract service plan tailored for food stores, and has developed it into a real merchandising tool.

The plan is based on a schedule of charges which varies by the number and size of condensing units used to power the store's refrigeration equipment, by the length of time it has been in service beyond the one-year warranty period, and by the number of expansion valves, water valves, blower motors and controls used in the system.

Rates are based on experience figures developed by the distributor, and are scaled upward as the age of the equipment advances.

When he signs the contract, the food store operator gets what amounts to an insurance policy covering the operation of his refrigeration equipment for the next 12 months. He is guaranteed "all parts, refrigerant, oil and labor necessary for the proper operation" of his equipment, with periodical inspections every four months. The price he pays is the

Schedule of Contract Service Charges

Condensing Unit Size	First Year After Warranty	Second Year After Warranty	Third and All Fellowing Years
1/4 HP	\$34.50	\$38.50	842.90
1/3 HP	34.50	38.50	42.90
1/2 HP	37.00	41.00	46.20
3/4 HP	40.00	45.00	49.50
1 HP	44.00	48.00	54.20
1½ HP	48.00	54.00	59.40
2 HP	55.00	62.00	68.65
3 HP	70.00	77.00	85.80
5 HP	100.00	112.50	125.00

Additional for Accessory Items:

TEV	3.00	6.00	9.00
Water Valve	5.00	8.00	12.50
Blower Motor	5.00	8.00	12.50
Control	3.00	6.00	9.00

Extras: for each TEV over one, \$9.00; for each water valve over one, \$12.50; for each blower motor over one, \$12.50; for each control (constant pressure, snap action, thermostat, etc.) over one, \$9.00. Note: these charges apply regardless of age of equipment past warranty period.

"premium" for this "accident insurance" policy.

If the service contract is a small one, the merchant may pay the whole sum when he signs; if it's larger, it may be split up into two, three, or four payments.

According to the contract, the customer is assured of four inspections per year; actually, most customers get five or six. Here's how it happens:

The distributor maintains a "case file" on each service contract customer, plus a visible index file, set up so that the service dispatcher can quickly check it. This index shows the date the various inspections were made, the information being posted from the individual service work tickets turned in daily by the company's service crew.

Thus, while the complete data (showing in detail the work done and parts used) can be obtained only by going to the case file, the visible index gives a quick "summary" of the situation, and enables the dispatcher to work these inspection calls into the daily routine by dispatching a service man when he's in a customer's neighborhood on other business.

A sticker calling attention to the 24-hour service which Engineering and Refrigeration offers is left by the service man on all the jobs he does. This sticker, usually located somewhere near the customer's telephone, provides space in which the service man notes the various inspection dates. It also puts the company's name and phone number where it's handiest in case of emergency.

New contracts are sent out a couple of months before the existing one expires. If the customer doesn't return it reasonably soon, he's contacted by phone. Where it becomes a losing proposition to continue the contract, because of wornout equipment that the customer refuses to replace, renewal contracts aren't sent.

Here's the Sales Tie-in

Where's the sales tie-in? Well, most of the service contracts are "sold" by the company's salesmen. The proposition applies to all makes of commercial equipment, so the salesment find it a first-class "door-opener" on "cold" calls, especially where the prospect is using a competitive make of equipment.

Also, it's source of extra income for the salesman. He's paid a commission on all new business he obtains, and another one for each renewal. It's not hard to see how a salesman can add several hundred dollars to his annual income if he really goes out and works to sell the service plan.

And you can't beat it as a source of leads for new-equipment business.

the new all MILLS

CONTINUOUS CUSTARD MACHINE

AND

BATCH ICE CREAM FREEZER



Greatest capacity and convenience. Refrigerated cabinet holds two 10 gallon cans. Mix is automatically fed to freezer as finished product is drawn off.

BIG YEAR 'ROUND PROFITS

Soft ice creams, frozen custards, frosted malts, and regular batch ice cream in all size packages are big, sure profit items.

Act now to get your Mills All-Purpose Counter Freezer and assure yourself of steady, startling year-around profits.

Write for free literature describing and illustrating the three models available and showing how sensational YOUR income can be.

MILLS INDUSTRIES, Incorporated
4104 Fullerton Ave. • Chicago 39, Illinois

FREEZERS



Scale model layouts like the one being prepared by these store planning experts enable a customer to visualize his market in advance. For typical results of such planning, see the next page.

PLANNING FOR PROFIT

TOP-FLIGHT refrigeration men agree, in principle at least, that "if the customer can't see it, he won't buy it", when it comes to purchasing refrigeration equipment for a complete market installation.

Many's the time a prospect's query, "but what will it look like?" throws a monkey wrench into the sales machinery. As a consequence, manufacturers of commercial refrigeration equipment have spent much time—and money—in the development of store-planning devices that will give the prospect a "preview" of the cases he's planning to buy.

Blueprints have long been, and still are, an important means of getting this picture across to the prospect. However, one of the newer methods has been to use actual scale models of the individual pieces of equipment, set out so as to duplicate, in miniature, exactly what the completed job

There's Profit in FOOD MARKETS

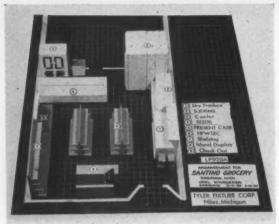
would look like. A pioneer in this field has been Tyler Fixture Corp.

"For years we worked with blueprints, making complete layouts and supplying plans," reports president Robert L. Tyler. "However, there are, we found, drawbacks to this system. Very few businessmen can read blueprints, or envision what a complete job will look like from a blueprint.

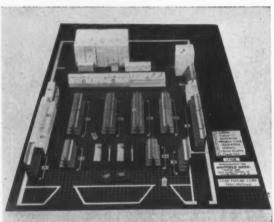
"Finally we came up with the idea of table-top planning to scale, using miniature models of fixtures. And the idea really works."

Here's how the store planning de-

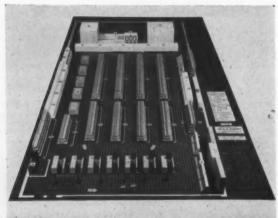
TYPICAL LAYOUTS FOR...



THE **SMALL** STORE



THE **AVERAGE** STORE



THE LARGE STORE

partment operates: when a distributor's salesman bird-dogs a new store that's about to be built or remodeled, he records over-all measurements, location of windows, doors and any inside pillars or permanent obstructions. The measurements are reduced in rough form, on a graph-paper questionnaire, which for uniformity is supplied by the company.

Store-planning men work on a planning table which is ruled off in squares, a half-inch to the foot. Referring to the salesman's data, they use masking tape to indicate outer walls of the store, and locations for all doors, windows, etc. are noted.

Sales Volume Is Important

For a remodeling job, required data includes past dollar sales because, from this, planners can project the increased traffic and modernizing will bring to the store, and prepare for effective selling. If it is to be a new store, as estimate of the anticipated sales volume is required.

With this data, plus additional information on the type of operationanticipated percentage of meats, dairy products, vegetables, packaged foods, canned goods, bottled goods, frozen foods, and the like-the store planning specialist goes to work. He uses the miniature models, as many as are required in relation to the size of the store.

"Bird's Eye" Photos Made

By moving the miniatures about like chess men, the working layout is obtained. The entrance path, traffic routes through the store, the exitsall come into vision. Position and number of check-out stations required can be determined.

In making the layouts, equipment is identified by key numbers. For instance, 1 may denote the bakery department, 2 the coffee department, 3 the meat cooler, 4 the produce cooler, etc. Small paper arrows can be pasted on the floor of the layout to indicate customer traffic flow.

When all fixtures and equipment are located properly, and after the arrangement has been inspected and approved by the head of the store planning department, "birds-eye" photographs are made and glossy prints, 8 x 10 inches, are prepared. At least four such prints are made-

Continued on page 74

DANGER SPOTS IN CONDITIONAL SALE CONTRACTS

THE retail merchandising of commercial refrigeration equipment by conditional sale agreements materially cuts the credit risk of the retailer.

In securing this benefit, however, greater care must be used throughout each transaction in the preparation and execution of the agreement, in the proper filing of the contract, in the collection of the installments and in the repossession of the property, than is necessary in ordinary cash or credit sales. This need of care continues until the account is finally marked paid or closed.

A recent case in the Indiana courts is typical of conditions that arise in these transactions where the use and ownership of the property is divided between two persons, the owner and the seller.

A piece of refrigeration equipment was sold under the usual agreement of this character, and the customer refused to make further payments on an unpaid balance of \$376.44.

The dealer suing to recover possession of the refrigerator by virtue of this unpaid and past due balance was met with the claim by the buyer of damages from defective performance in excess of this unpaid balance.

The law, said the Indiana court in awarding possession of the refrigerator to the seller, is that a retailer has the right to elect to take possession of his property for the failure of the buyer to make his payments as agreed under his contract, but by so doing he forfeits any right

By Robert Woodruff Gray

(Gray is a New York attorney with 10 years of experience in the practice of law, and also is the author of a law book.)

to the recovery of an unpaid balance.

A dealer or contractor selling refrigerating equipment by contracts of this character must be alert to the clear distinction between sales made in this manner and those made by cash, credit, or with payments secured by chattel mortgages.

Recently the Supreme Court in Ohio laid down a simple rule for determining whether a sale agreement was a mortgage or a conditional contract. "A contract," said the court, "which provides that the chattel sold is to remain the property of the seller until the purchase money is paid is a conditional sale. If the intent of the parties is that the title shall not pass to the buyer until the condition of payment is met, the transaction is a conditional sale no matter what may be the form of the transaction."

When a dealer gives possession of his refrigeration equipment to the conditional buyer, there is always the danger that the equipment may pass from the possession of the buyer to an innocent purchaser by a sale made in bad faith by the conditional buyer. Likewise, there is the possibility that it may go to creditors or a bankruptcy trustee in the event of an economic collapse of the customer.

Protection against these hazerds in every state lies solely in a strict compliance by the seller with the statutes relating to the filing or recording of these agreements, and woe betide the dealer who fails in a scrupulous observance of these laws.

Frequently, ill advised dealers seek to escape the provisions of these statutes by referring to the contract as a lease and to instalment payments as rent.

In a law suit in Maryland some years ago that involved this question, a federal court made the distinction that: "A lease contemplates only the use of the property for a limited time, and the return of it to the lessor at the expiration of that time; whereas a conditional sale contemplates the ultimate ownership of the property by the buyer, together with the use of it in the meantime."

Aside from the necessity for the observance of these laws relating to the filing or recording of conditional sale agreements, a dealer has a wide latitude in the obligations he may ask the buyer to assume under these agreements. A frequent provision of this character is that the buyer will pay, as a condition of the agreement, not only the purchase price of the equipment but "all other sums which may be or become due" from him to the seller.

A conditional sale agreement for the sale of machinery in Massachusetts stipulated that the buyer should not only pay the agreed price for the equipment but also provided that

Cash In On Frozen Food Cabinets

A CCORDING to all reports, the frozen foods business is set for a sizeable expansion in 1950. This expansion will involve the placement of thousands of frozen foods cabinets in food stores, large and small, across the country.

It's a sales field that no commercial refrigeration dealer can afford to overlook in his program for 1950 business—because it's up to him, in large measure, whether the sales of these thousands of cabinets are made through him, or around him.

Remember what happened with ice cream cabinets? And beverage coolers? Refrigeration dealers didn't pick up the sales ball—so this lucrative business went around them. The dairy interests, and the beverage producers, took over. The same thing could happen—and in all probability will—with frozen food cabinets, if refrigeration dealers don't make their move this year.

What's the market? Quick Frozen Foods magazine reports that an estimated 100,000 food markets now have frozen food cabinets. It sets the market for new cabinets at from 250,000 to 300,000, not counting replacements or additions of cabinets to those now in stores—and not counting, also, the growing institutional market in hospitals, restaurants, hotels, etc.

Who are prospects? Food stores of all sizes. Big stores need additional cabinets—Quick Frozen Foods says that within the next five years every store doing over \$150,000 a year will need three: one for frozen fruits and vegetables, a second for frozen juices, and a third for bulky products like poultry, meats, baked goods and specialties. Smaller stores will need at least one cabinet. Here it's a matter of space, with the capital investment necessary presenting a second problem. But these smaller stores represent a definitely large potential market.

Bigger stores, besides their display needs, may also require walk-in freezer space in which to carry stock to cut down frequency of deliveries by frozen food distributors.

Is a different sales technique needed? It begins to look like it. Not so much with bigger stores, which, after all, recognize frozen food cabinets as an indispensable part of a new industry—but decidedly so with smaller stores, where frozen foods may represent the first step in a brand-new direction. Here cabinets have to be *sold*—and by a special effort—by men who know how to sell this one product.

The primary job is to sell the food merchant on frozen foods—and that's a job for the frozen food distributor, not the refrigeration dealer. But the two can work together, the food man to sell the idea, and his line of products, and the refrigeration man the equipment. The dealer can arrange to have the food distributor "bird-dog" for him, on a commission set-up. This cuts his margin on sales, but he retains the service—and the first shot at additional cabinet business.

Frozen food distributors know they're not in the cabinet business. For the most part, they don't want to be in it. But they're getting pressure from top-side—and they know for sure that frozen foods can't be sold without cabinets to display them in. The frozen food industry is ready with the product—it is waiting for the cabinets needed to sell it. And if refrigeration men don't sell these cabinets, food men will see that their retailers get them—through rental, special financing, or what have you.

It's up to you, Mr. Dealer: will this business go through you, or around you?

"all bills for the repairs should immediately fall due and must be paid" as an additional obligation under the contract.

Of provisions of this character the court in the state of Washington remarked that it would seem to be a reasonable rule that permitted parties to make such contracts as they might desire, binding between themselves so long as the contract contravened no rule of law or public policy.

The description of the property in the contract must be always set out with sufficient detail for its identification by others than the parties to the contract. A suit that turned on whether or not such a description was adequate was brought against a refrigeration company in the federal court in Minnesota.

The law in that and many other states is that the property sold must be described in sufficient detail to "enable third persons, aided by inquiries which the instrument itself suggests, to identify the property."

The lower court here has held that the following statement written into a printed form of agreement:

One F. O. 5 M, Z-1163 \$644.00 194.00 450.00

failed to meet this requirement, although preceded in the printed form by the words, "Equipment Order."

This the higher court held was an adequate description. "It would not be beyond the powers of a person with ordinary mental equipment, who read the entire contract and followed up such inquiries as were reasonably suggested by it, to discover that the buyer had purchased a new refrigerator."

Nevertheless such a question, when it must be debated in the courts, proves at best expensive—irrespective of the results of the controversy. A dealer can readily avoid such difficulties by the filling in of an accurate and full description of the merchandise sold, the model and serial number, and any other identifying features.

Another important duty that rests on a dealer is that the contract must be signed by him as well as by the customer, and a copy so signed delivered immediately to the buyer. This means not a mere carbon copy of the contract, with only the carbon tracing of the customer's signature, but a completely executed duplicate with the seller's signature subscribed to it.

The statutes in many states provide that every instalment agreement must be signed by all the parties and that the buyer shall have delivered to him by the seller an exact copy of the agreement, signed by both the dealer or seller as well as the buyer. If the dealer fails to do this, under the statutes of some of the states the agreement, after a specified number of days from the date it is signed, becomes void and the buyer can not only cancel the agreement but can also recover any payments he may have made.

How to Avoid Disaster

In selling refrigerating equipment under agreements of this character, the dealer must at his peril follow the statutes governing the filing or recording of conditional sale contracts. The disasters he will encounter from a failure so to do are such as might arise from the transactions of the buyer with others than the dealer, such as creditors, innocent purchasers of the goods sold under such an agreement before the price has been fully paid and the buyer has become the owner of the equipment he attempts to sell, and with trustees in bankruptcy.

In every instance where losses of this character occur they could have been avoided by the filing or recording of these contracts.

Case History Cited

The Sterling Refrigerator Co. sold a refrigerated display case in Maryland for \$786.25. A statute in that state is that a conditional sale agreement is void "as to third parties without notice until . . . such contract be in writing, signed by the buyer and recorded . . . "

This display case was delivered on Feb. 11. The contract for its sale was recorded on Feb. 17, six days later. While still owing \$534.25 on this contract, the buyer became bankrupt. When the selling company claimed its display case it was met by the trustee in bankruptcy with the protest that one of the creditors of the buyer had made its first deliveries on an open merchandise account between Feb. 11 and 17, the

Continued on page 80



George L. Lehmkuhl, who manages the fresh produce section of Lehmkuhl's 36-year-old family-owned neighborhood market, puts a little reverse English on selesmanship when he demonstrates to E. R. Hare, seles representative of Frigidaire's St. Lust branch, how his new double-duty vegetable display case increased his sales volume 30%

Proof of the Profit . . .

THE important part modern refrigerated fixtures play in the profit picture for small neighborhood markets and groceries is graphically portrayed in the J. B. Lehmkuhl Market, Hodiamont and Ella streets, St. Louis, where a modern self-serve vegetable case has replaced the old-style dry merchandising racks.

The Lehmkuhl Market, family-owned and operated on the same location for more than 36 years, has increased its fresh vegetable sales volume by 30% since a modern 10-foot double-duty Frigidaire refrigerated display and storage case was installed. George L. Lehmkuhl, a member of the firm and manager of the store's fresh fruit and vegetable section, says that "in addition to dressing up the department, fresh produce trim and dehydration losses have been reduced as much as 50%."

Along with having nearly 20 sq. ft. of refrigerated display shelf area, the case has a storage capacity below of more than 25 cu. ft. "This extra storage space, Lehmkuhl declares, "saves much time and effort because additional perishables are at your fingertips in the shopping area." Vegetables remain in the case overnight, eliminating the task of unloading and loading at night and morning. In addition, the flat counter-top is utilized as a display shelf for salad oils and mayonnaise—a "natural" tie-in item with the crisp, firm array of vegetables.

Vegetables are kept crisp and fresh by cold moist air supplied by two dry expansion type gravity cooling coils. Gutters, located below the cooling units, carry defrost water to the drain. The case is refrigerated by a rotary-type sealed Meter-Miser refrigerating unit suspended from the ceiling of the basement below—a unique new installation approach developed by J. J. Tenge, one of Frigidaire's commercial dealers in St. Louis, to conserve valuable floor area for storage of bulky merchandise.



SALES CONSULTANT COFFEY (left), once a grocer himself, takes a prospect out to look at one of his company's existing market installations. Then, after introducing the two men, he. . . .

TAKES ONE...





There's no better salesman for self-service food market refrigeration than the market owner who already has installed it. By capitalizing on this fact, this Texas dealer has boomed his business.

SELLING self-service, open type refrigeration equipment to food market operators requires specialized know-how and a distinctively different technique, according to the experience of I. M. Bartholomew, owner of Zerozone Houston Co.

This firm distributes Hussman refrigeration equipment in Houston, Tex., concentrating heavily upon the merchandising of self-service refrigerated store fixtures. One of their principal problems in this endeavor has been to sell the smaller, independent grocers upon the advantages of changing over to self-service operation and to convince these "little fellows" that self-service can be practical—and profitable—for them, regardless of their size.

It seems to be the opinion among small food market operators that to go self-service successfully requires a large store—one completely out of line with their thinking and their pocketbooks. This feeling no doubt has its origin in the fact that the big chains with their supermarkets were the ones to pioneer the self-service type of operation.

To combat this negative type of thinking among such a large group of its potential customers, Bartholomew decided to go outside the refrigeration field to hire a merchandising expert who not only could show these corner grocers what self-service could do for them, but who also had the experience and the prestige to back up his claims.

Paul R. Coffey was the man selected to fill this role. Formerly a merchandising man with a well known local chain grocery organization, Coffey also had successfully operated a few independent grocery stores of his own in Houston. Locally he was accepted as an authority on grocery merchandising, but he knew absolutely nothing about refrigeration except from the standpoint of the equipment user.

This was just what Bartholomew wanted.

Coffey definitely does not function as a salesman. In fact, he himself makes no sales whatever. Since joining the Zerozone organization, however, he has been directly responsible for more sales than all of the firm's six salesmen combined.

The explanation of that somewhat paradoxical situation should be obvious. Coffey knows the grocer's problems. He talks the grocer's language. Consequently the majority of the grocers with whom he talks respect his judgment and follow his advice.

Let's see just how Coffey functions in his unique capacity with Zerozone.



LETS THE CUSTOMER SELL THE PROSPECT, while he himself idly strolls away to give the two market operators a chance to talk shop by themselves. Result: another market job in the bag.

Let's say a salesman has dug up a prospect for a reach-in box. (Yes, Zerozone handles them, too.) The salesman hands in the prospect's name along with the type of box in which the prospect is interested. Chances are that Coffey will know the store, and that the store owner will know Coffey-either personally or by repu-

Together Coffey and the salesman call upon the retail grocer. Upon looking over the physical layout of the store, Coffey starts making suggestions. Because he knows the grocery business he starts off by telling the grocer what he wants to hear-how he can increase his sales and dollar volume-not that he would do better buying the equipment from Zerozone instead of from a competitor.

The average small retailer is going to tell Coffey that he is not set up to go self-service. But Coffey knows better, and starts to explain how simple and profitable it would be for him to make the change.

Remember, this prospect showed interest in a reach-in box, and it would be rather a simple matter to sell him one. But Coffey points out to him that this is not what he needs.

Why? Both the grocer and Coffey know the importance of impulse sales, and realize how much they add to the store's volume when the receipts are totaled. Whether or not a store today considers itself a selfservice type of operation, few customers will stand idly by to be waited upon. They will, invariably, start waiting upon themselves to save their

When a woman walks up to a reachin type box, Coffey points out, she has only one hand free to pick up merchandise. She must use the other to manage the door. When she is shopping from an open type case, however, she has both hands free to pick up items. When the grocer sees it pictured this way, he becomes interested. He can visualize added sales with no extra effort on his part.

Floor space, Coffey continues, is valuable to any grocer. A reach-in type box takes up too much floor space, he points out, compared to an open case such as a three decker, for instance.

between Coffey and the prospect, factors concerning the grocery business

This tends to further bolster the grocer's confidence in Coffey's judgment.

About this time, Coffey suggests that he draw up a floor plan for the grocer and that they discuss the proposed change-over from there on that basis. Generally this is agreed upon. And more often than not the grocer accepts the conversion because he has respect for Coffey's experience in the merchandising end of the grocery husiness

Continued on page 55

While this discussion is being carried on in a conversational manner in general are subtley introduced.



I. M. Bartholomew, owner of Zerozone Houston Co., looks up from the food market layout which he is examining with Paul R. Coffey, his ace self-service

COMMERCIAL RESERVED REFRIGERATOR SALES NEWS

Successful Year Anticipated by Commercial Refrigerator Men

A RECENT poll conducted by the National Commercial Refrigerator Sales Association of members located in various sections of the country reveals that distributors generally expect 1950 to be a year of good business.

The need for replacing outmoded equipment and the remodeling of grocery stores to self-service or super market are the primary reasons given for the optimistic outlook.

A sampling of comments from association members follows:

What They Said

"The outlook for the entire year is as good as 1949."

"I believe business will hold up until about July, 1950 or until the steel supply catches up with the demand. After that business will taper off, which will be the second warning to get our house in order, consolidate your gains and plan your business ahead instead of taking it as it comes."

"We expect that the store fixture business and the refrigeration business will be better in 1950 than in 1949. We expect, however, that prices will be quoted at much closer margins than at any time since before the war."

"The business outlook is bright in our territory, and we anticipate a volume of business comparable with 1949. We think business is where you find it, and a distributor who has a satisfactory volume is the man who has well-trained salesmen who know how to sell merchandise—and we think business will be good for those who do a good selling job."

"The business outlook for 1950 should be good. Building of homes and stores will be very active in 1950 which should affect our business likewise."

"As we start 1950 and review the business outlook, we find there is a great deal of prospective business in sight. In fact, it seems to us there is more business in sight in store improvement than in any period, except that period immediately following the war, when everybody was scrambling for goods."

Profit Picture Needs Watching

However, there is a note of caution reflected in comments of others who are concerned with the effects that trade-ins, price-cutting, and low-margin operations will have on the profit picture.

For example, an eastern distributor states:

"The distributor should, at all times, bear in mind, what his costs are, what his actual expenses are, make a fair profit and stick to his price list. If he does this, he will establish himself more solidly in his own territory and wind up the end of the year with the one thing he started his business for, namely . . . PROFIT.

"Business in 1950 should be good, from all indications, and from the way January has started off, and from what the economists tell us all over the country. We are fortunate to be closely related and because perishable food products must be properly refrigerated, we are indeed in an excellent position.

"But we must remember that it is not wise to do a big volume of business, and permit our expenses and costs of merchandise to creep up to such a point where the business becomes unprofitable.

"An intelligent, down-to-earth-lookat-your-operation-now, may be the difference between RED and BLACK figures at the end of 1950,"

Comments from a middle western distributor, along the same lines, are as follows:

"There is of course a disturbing factor in that the business which is being sold, is being auctioned off. In spite of increased service we are offering in the way of planning, financing, store arrangement and placing of goods for the merchant, all the arguments center down to price and this price situation is apparently brought about by the fact too many distributors, or agencies selling equipment, do not seem to have any idea of the

YOU CAN SEE IT'S SAFE



Customers of a new Kroger super market in Toledo, Ohio, can see for themselves that most in this refrigerated self-service case is kept at the proper temperature, thanks to specially installed Auto-Lite thermometers. Here Store Manager Charles Boes explains to Clerk Olive Pierson how the thermometers indicate "safe", "too cold", or "too warm" temperatures. The thermometers were installed on the store's regular refrigeration equipment.

proper markup. Many agencies seem to think if they can get 10% over the cost of their goods, they are going to do all right. They forget the cost of overhead, taxes, insurance and other contingent expenses, and merely look at the one profit they think they can make. This directs my thoughts to the fact that a good organization of distributors in this industry is one of the most essential things confronting the people in the fixture business at this time."

Another distributor in the middle west says:

"Our company's business outlook Continued on page 89 DETROIT CERTIFIED

VALVES



No Matter How You Look at it...

No matter how you look at it—from the standpoint of sales, profits, or customer satisfaction—the new Detroit 777 valves are a truly remarkable advance in the refrigeration field. Rugged, simple, compact construction makes them a sales natural, while their added economy and easy servicing requirements mean both initial and long-range profits. Too, the efficient and dependable performance of these valves results inevitably in real customer satisfaction. Truly, the Detroit 777 series was made to order for you—designed and built from the accumulated experience of men who know your problems. Learn for yourself why Detroits new 777 expansion valves are the talk of the industry, by contacting your nearest Detroit distributor. It's another great Detroit achievement—helping you with your future.

ETROIT LUBRICATOR COMPANY

5900 TRUMBULL AVE., DETROIT 8. MICHIGAN Division of Assessor Rankton 8. Shardard Sanitary corrections canadian Representatives: RAILWAY & ENGINEERING SPECIALTIES, LTD.—Montreal, Teronto, Winnipag



"IT'S A NATURAL" for Sales and Profits!

The New 777 Series Brings You:

- Simple, compact, and rugged construction.
- Large wrench flats—for standard wrenches.
- Cartridge needle and seat assembly simplifies cleaning and inspection.
- Accessible superheat adjustment.
- Stainless steel and brass throughout.
- Anchored Capillary for strength.
- Polished Flare Faces.
- Ball-Type Needle gives desirable flow characteristics.
- Interchangeable Inlets 1/4 and 3/8 SAE.

DETROIT HEATING AND REFRIGERATION CONTROLS • ENGINE SAFETY CONTROLS • FLOAT VALVES AND OIL BURNER EQUIPMENT • DETROIT EXPANSION VALVES AND REFRIGERATION ACCESSORIES • STATIONARY AND LOCOMOTIVE LUBRICATORS

Securing Admit and industry, american standard . American riches + church seats + betech lubuicator . Kemanel boles . Bost hears + tonawanda iron



By Leonard F. Auerbach

NOW that we have completed the freshman section of our "Quick Course in Air Conditioning Engineering," let's go out to see some prospects—or even suspects.

It is always important to qualify your prospect. But in air conditioning we have some special problems along that line, and if we don't do a good qualifying job at least half of our sales time is wasted.

We not only want to eliminate dead prospects, but we also want our live prospects to have a good mental attitude toward our proposal.

It's not at all unusual for a restaurant man to tell you that his

rriend has a shoe store exactly the same size as the restaurant. The shoe store was air conditioned for \$1480. He'll probably also let you know that he intends to spend no more than that himself.

In questioning him, you might find that the friend's place has floors above, while his restaurant is under the roof; that no more than 10 people at a time ever are in the shoe store, while as many as 60 may be in the restaurant; that the shoe store is exposed only on the north, but the restaurant has loads of west glass; and that his friend had the plumbing and wiring put in when the building was built, while our prospect has a basementless building with insufficient water and drain.

If this prospect is in the restaurant business he needs air conditioning, but it would be best to let him know early in the game that he's talking \$4300 to \$4800, including some ventilating changes that will have to be made.

If he is going to decide you're a robber, you don't want to spend too much time with him. Even if he understands your figuring but can't see his way clear to make that kind of investment, you might as well get out of the deal before you waste a lot of sales time or engineering time on him.

You can't do your qualifying on the basis of physical appearance of the establishment, or on your preconceived idea of what places buy or don't buy air conditioning. One new salesman impressed that lesson on me.

He hadn't been told that a dog hospital wouldn't be a good prospect. This young fellow was so dumb that he canvassed one. Since neither he nor the hospital owners were smart enough to know that they weren't air conditioning prospects, he sold them some. Let's all be that dumb.

Make a "Guesstimate" Early

Here are some of the special things to consider and clarify early in your conversation. You must remember that most of the things to be discussed here are beyond the normal interest and knowledge of the prospective purchaser. Usually your best bet is to excuse yourself as early in the conversation as possible so that you can look around and try to make a "guesstimate" of the load, and check for installation information.

You will want to know, for instance, about type and availability of

These articles have been written on the basis of the author's own experience, which has included positions as sales engineer in air conditioning for Spohn Heating & Ventilating Co.; sales manager of air conditioning for Allied Refrigeration Sales Corp.; director of sales, air conditioning division, Temperature Equipment Corp. He is currently engaged in air conditioning sales work with Refrigeration Sales Corp.

electric power. In some areas the power company will charge for bringing in additional power. In other places there is no charge, but they will only bring it into the building at the same place as their existing service enters the building. If that point is ten stores away in the same building, the charge for wiring will be a big item and you should give the man some idea of the total number of dollars involved before you get too far into the deal.

Cost Factors Vary

In a multi-story building, there is usually a problem of bringing services from the basement to the space to be conditioned. This again involves many dollars and should be recognized.

Another factor which can affect the simplest installation price-wise is the type of power available for any given job—single phase or three phase, 220 or 440. Usually, by being familiar with local power company practices, you can have a reasonably good idea of what types of power to expect under varying conditions and circumstances.

Precautions also should be taken in checking your sources of water and drain. If the water line entering the building isn't large enough, you know there will be the expense of either a new water line or a cooling tower or evaporative condenser. If there is enough water in the building, but not near your proposed installation, you need an idea of what the costs will be to run the water line and insulate it, if necessary.

Check Drain Problems

Because of the unwillingness of drain water to run uphill, the location of drains is another problem. Will a drain from a second floor office run past the cash register of a first floor store? Is it a basementless building, which will mean breaking up concrete to reach a sewer? Does the equipment go in a basement which is below the sewer? If so, that puts you in the sump pump business.

Don't get the wrong idea from the preceding paragraphs. You haven't just seen a list of reasons for not going into the air conditioning business. But you have just read a list of some things which are just as

Does New Equipment Pay Its Own Way?

DOES new equipment on a "pay-as-you-go" plan pay its way? You bet! Consider the case of Clyde and Hubert Stovel, owners of the Service Food Store, Lubbock, Tex.

Here's the chain of reaction set off by their purchase of a 12-foot refrigerated produce case in November, 1946:

- 1. Refrigeration lowered produce spoilage from between 8% and 10% down to 4%, a drop of 50%. Saving in dollars was \$3.30 a week.
- 2. Produce business doubled, from \$150 to \$300 a week. At an average gross margin of $27\frac{1}{2}\%$, that meant \$41.25 more profit a week. Together, savings totaled \$44.55 a week, or \$2,316.60 a year.
- 3. With the savings from their produce case, the brothers spent \$1,324 for a 10-foot refrigerated dairy case. They organized all their dairy items in one section. Dairy products sales started climbing, and are now 60% higher than they were before the new case was installed.
- 4. Combined profit from produce and dairy sections practically paid for a new 10-food frozen foods case, costing \$1,785. Now the store is doing \$200 frozen food volume a week (ice cream, fruits, vegetables, fish), averaging 32% gross.
- 5. With the three new cases, the Stovels have modernized one entire side of their store. Total business has been almost tripled. And the "pay-as-you-go" equipment is building up additional savings (and profits) to pay for further modernization the brothers have in mind.

important to your success as knowing the color of a Btu.

Awhile back we were discussing the importance of qualifying prospects, and the special meaning it has in our business. All of the good sales books say that a real salesman can sell anybody anything. There are only two things wrong with that: first, not many of us are real salesmen; and second, some of our prospects don't know they'll buy anything.

With those two facts in mind, we must recognize the immovable objections of the prospect which will not be ruffled by the irresistible force of our salesmanship.

Just last week a super-market owner told me, before I had finished saying hello, "It costs too much money." I asked him how he knew, and he said he just knew it would.

I asked him if I could take a look around, and of course he said I could. After measuring the store (actually, for a preliminary figure, I just counted the nine-inch blocks of asphalt tile), and checking the basement for power, water and drain, I was in a position to tell him—at the proper time—that the cost of the complete installation would come to between \$4000 and \$4500.

He then came thru with his story about how cool the place was in the summer (which, as in most cases, was a darned lie), and about how well the unit heater fans worked in keeping it cool.

I have enough faith in my ability to know that I could have gotten him to let me give him the entire routine, including a proposal, if I had wanted to press him. But considering the background information I had picked up on him, I felt it would have been a waste of time to go into that much detail with him in December.

Consequently, he was given a story about all our facilities (including our service department), one of my cards, a "thank you" and an "I'll

Continued on page 86

DON'T LET THE LITTLE ONES GET AWAY

There's Profit in FOOD MARKETS

THE smaller food store—and by that we mean the store doing \$2,000 or less, on the average, per week in volume—represents both a challenge to the commercial refrigeration dealer and an excellent opportunity for additional refrigeration sales and profits.

According to an estimate by Progressive Grocer covering 1948, approximately 302,300 of the nation's 375,500 independently-operated food stores did an average business of less than \$2,000 weekly. So, in point of numbers, the market certainly is large enough. And this figure does not take into account those stores selling meats or seafoods only, fruit and vegetables markets, and retail dairy products stores—all of which have need, in varying degree, for refrigeration.

The small food merchant needs refrigeration equipment. But the problem of selling it to him is not always an easy one. In the words of one successful refrigeration dealer, the small food merchant buys "with dollar signs in his eyes".

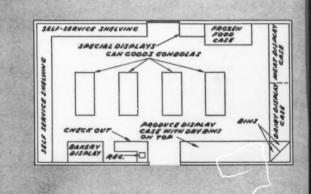
It's up to the refrigeration salesman, then, to "see" him, and "raise him five", as far as dollar signs are concerned.

Based on interviews with a number of commercial refrigeration distributors and dealers who specialize in selling to smaller stores, here are some pertinent points to remember in your dealing with these prospects. For the sake of brevity, we've set them up in question form.

Why Cultivate the Smaller Store?

A number of reasons. 1) There are more of them. 2) Profit opportunities are better, because no national account price is involved. 3) Generally speaking, the smaller the store the more its refrigeration equipment needs modernizing. 4) If he's an alert merchant, you can make him a "continuing" customer—work with him to

Here's how a properly arranged small store can look when it's completed. This particular store is located in a basement but you'd never know that just by looking. The layout is planned for sales.



THE ARITHMETIC OF STORE PLANNING

Store planning is a matter of simple arithmetic. A bulletin issued by Independent Grocers Alliance says the first step in store planning is to analyze the store's potential sales volume. This includes an analysis of the trading area—the size and type of population, kind of competition, number of chains in same area, and the parking convenience.

Next step is to allot the proper spaces for display according to percentage of total store volume that each department is expected to account for. In setting up a new store, a rather definite ratio of size (floor area) to anticipated volume can be established. For example:

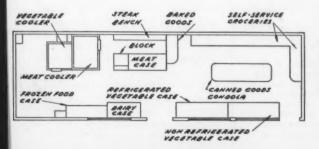
- \$3,000 Weekly Sales: store 20 x 50—1,000 sq. ft. @ \$3 per sq. ft.—sales capacity \$2,000 to \$4,000 weekly.
- \$5,000 Weekly Sales: store 20 x 85—1,700 sq. ft. @ \$3 per sq. ft.—sales capacity \$4,000 to \$8,000 weekly.
- \$8,000 Weekly Sales: store 30 x 90—2,700 sq. ft. @ \$3 per sq. ft.—sales capacity \$8,000 to \$10,000 weekly.
- \$10,000 Weekly Sales: store 40 x 100—4,000 sq. ft. @ \$3 per sq. ft.—sales capacity \$10,000 to \$12,000 weekly.

Floor area required for individual store departments is figured according to a percentage breakdown based on anticipated volume from each department. Average percentages used by IGA are: meats 27.33%; produce, 13.22; dairy products, 10.82; bakery goods, 8.24; frozen foods, .77; coffee, 2.97; candy 1.08; groceries, 29.97; non food items, 1.76; specials, 3.90. Using these percentages, the space needed for refrigeration-using departments of various size stores would be:

Department	Pct. of	_	Estima	ated We	ekly Sale	s Volume-	
	Weekly Volume	\$3,000	\$5,000	\$8,000	\$10,000	\$15,000	\$20,000
		_	-Lineal	Feet of	Display	Required-	
Meats	27.33	10	20	30	37	55	73
Produce	13.22	16	16	26	33	50	66
Dairy Produc	cts 10.82	6	10	14	18	27	36
Frozen Food	s .77	5	7	12	15	23	30

Note: Percentages shown above are estimates of percentage of total sales each department will account for. In terms of dollar volume per lineal foot of display, figures are: meats, \$75; produce, \$25; dairy products, \$60; frozen foods, \$5.

Estimated weekly dollar volume figures shown in tabulation are for all departments of store.



Shown at the left are two typical small store layouts. These are not shown in exact scale size here, but are presented to show typical equipment placement—and how even the smaller stores can use, profitably, sizeable amounts of commercial refrigeration equipment.

build sales, and sell him more equipment. 5) You can get—and keep him as a service customer.

How Much Equipment Should He Have?

It all depends. Even the smallest food store needs a reach-in refrigerator up to 30 cu. ft. in size, and if the store handles fresh meets, a display case as well.

Larger neighborhood stores will use a reach-in refrigerator for dairy products only, display case for meats, a separate display case for fish if volume on this type of product is good, and self-service cases for lunch meats (and sliced pre-packaged bacon and ham), fresh produce, frozen foods and ice cream. Stores doing a volume in bottled beverages often can use a separate reach-in for this purpose. Walk-in coolers for storage of vegetables, meats, dairy products, and frozen foods are added sales possibilities for keeping of reserve stocks.

How Determine the Equipment He Needs?

Each store requires individual study. Sales volume, type of neighborhood, type of customer served, size and location of competitors—all these must be considered. Some of these questions the merchant can

answer; the others must be determined by observation and study.

Type of customer is especially important in helping determine whether the store is getting as much of a certain kind of business as it should. For example, the store that catches customers on their way home—and in a hurry—can do well with frozen foods, ice cream; the store located in an industrial-worker district can increase its lunch meats business. Other stores can add delicatessen products and do a good volume in them. But only a study of the merchant's individual situation can give the right answers.

What are the Major Sales Problems?

1) Overcoming the "price" objection. "The average small merchant buys with dollar signs in his eyes."
2) Seeing that the size of equipment installed is adequate for the volume he should logically expect to do. The dealer who wants to keep his customers will insist on selling equipment of proper capacity. Inadequate equipment won't pay out, profit-wise—and the merchant will blame the dealer, and buy his next piece of equipment from somebody else. 3) Laying out the store for maximum sales. This may mean a major rearrangement.

Here, experience can be a big help, but knowledge of the store's particular problems determines what must be done. 4) Teaching the merchant to use his equipment to best advantage after he's bought it. Most grocers are "canned goods" men. They must be made to realize that few, if any, products sell themselves; frozen foods, for instance, need a "push" to get them going; attractive displays, attention-getting devices, etc. are all part of the merchandising picture. And suggestive selling helps, too.

Does Store-Planning Help Sales?

Yes indeed. It's the easiest and best way to get the merchant to "see" what he's getting. Even with the smallest stores, it's a major help in overcoming sales obstacles.

Is an Elaborate Set-Up Needed for This?

No. But all layouts should be to a definite scale, and the layout should be presented to the merchant with all locations neatly designated. It's all a part of helping him "see" the whole picture. Store planning helps the merchant utilize his store space to best advantage, gives an over-all picture so potential dead-spaces can be eliminated.

What are Primary Considerations in Planning?

Plan your stores this way: first, the operator's convenience; second, merchandising possibilities; third, customer convenience. The operator's convenience comes first because he works long hours, with minimum help, and must be able to move stocks in and out as easily and quickly as possible. The "merchandising" phase of store layout involves giving patrons maximum exposure to the products displayed. Low-profit demand items, for instance, can be located toward the store's rear, highprofit items where traffic is highest and selection handiest. Make the meat and fish department a unit, the produce section another unit, etc.

Another primary problem is to help the merchant get the maximum benefit from the number of employees he has. Proper planning helps accomplish this, by permitting the meat man, for example, to help out in the fish department when his

Continued on page 82

SHELVING-A Plus-Profit Item



Any commercial refrigeration 'dealer or contractor increases his chances of selling a food market installation job—and enhances his profit possibilities in installing it—if he is equipped to supply a complete line of non-refrigerated fixtures and shelving to go along with the refrigeration units which he handles. The photo above shows a complete market installation of shelving and gondolas erected on Hirsh-Standard steel uprights, produced by S. A. Hirsh Mfg. Co., Chicago. Prefabricated assemblies such as those provide an ideal answer for the dealer who does not care to concern himself with the time, trouble or expense involved in setting up a shop for the complete custom building of such equipment.

REFRIGE Trews 1015TRY

SAVAGE ARMS BUYS C. V. HILL COMPANY

Purchase of the capital stock of C. V. Hill & Co., Inc., Trenton, N. J., by Savage Arms Corp. was announced recently by Frederick F. Hickey, president and general manager of Savage Arms. The purchase is subject to approval of stockholders of Savage Arms at the annual meeting April 18.

Price to be paid for all of the common stock is approximately \$3,500,000. The agreement requires that Savage obtain at least 95% of the outstanding common stock.

The move is being made by Savage to expand its present refrigeration business, which includes the manufacture of ice cream cabinets. Hill is one of the largest manufacturers of refrigerated self-service display cabinets for the retail sale of meat, fish, vegetables, dairy products, and frozen foods.

C. V. Hill & Co., established in 1889 by the late C. V. Hill, Sr., has been operated in recent years by his two sons, J. Stuart Hill, president, and C. V. Hill, Jr., vice president. Sales during 1949 were approximately \$11,000,000. The company employs about 850 persons in its plant in Trenton, which contains 430,000 sq. ft. of floor space and is located on a 15-acre plot.

Hill products are distributed through 200 distributors in the U.S., and are made in Canada through an arrangement with Fabien Ltd., of Montreal. Other foreign distribution is handled through International General Electric Co.

Upon approval by Savage stockholders, Hickey will be elected chairman of the board of Hill, as will Gordon T. Wood, vice president and treasurer of Savage, and Thomas S. Kernan, of Kernan & Kernan, Savage general coun-

KELVINATOR RECEIVES PATRIOTIC AWARD



Charles J. Coward, (left), Kelvinator merchandising manager, receives congratulations from Alien B. Crow (right), after accepting the national gold medal award of Freedoms Foundation, Inc., for "austratanding achievement in bringing about a better understanding of the American way of life." The award was presented at a lancheon meeting of the Adecaft Club of Detroit, by Konneth D. Wells (center), executive vice-president of the foundation, for Kelvinator's full-length motion picture on America," Of This We Are Proud." Crow is a Detroit director of the foundation.

sel. The board is now composed of J. Stuart Hill, C. V. Hill, Jr., and Earl Kress-

Under the new arrangement J. Stuart Hill and C. V. Hill, Jr., will continue as president and vice president, respectively, of the Hill organization. There will be no changes in the company's name, organization or policies.

Directors of Savage Arms have added to the list of nominees for directors to be voted on by stockholders at the April 18 meeting the names of J. Stuart Hill and Charles W. Hall, president of Oneida National Bank & Trust Co., Utica, N. Y. Executive offices of Savage Arms are at 60 E. 42nd St., New York City.

NEW QUARTERS

Automatic Firing Corp., St. Louis manufacturer of heating and cooling equipment, has moved its general offices to a new and modern factory at 4417 Oleatha Ave., St. Louis.

NEWARK STUDIES CURBS ON WATER

Because of the critical shortage of water in storage there, the Division of Water of Newark is considering the adoption of regulations to control the use of water in refrigeration and air conditioning equipment, and to require water conserving devices to be installed, it is reported by William G. Banks, division engineer.

WEBER PAYS \$250,000 EMPLOYEE BONUS

Profit sharing bonuses of approximately \$250,000 to salaried employees for 1949 have been announced by Karl Weber, president of Weber Showcase & Fixture Co., Los Angeles.

Under the Weber Co.'s bonus policy, approximately 40% of net earnings for the year has been distributed to employees, one-fourth more than total dividends paid, according to Weber.

REMA MEMBERSHIP MEETS IN CHICAGO

The usual product section meetings and business sessions, plus an impressive roster of guest speakers and a full schedule of social activities, rounded out the annual membership meeting of Refrigeration Equipment Manufacturers Association at Chicago's Edgewater Beach Hotel March 30 through April 1.

Heading the list of guest speakers was Louis B. Seltzer, editor of the Cleveland Press. His subject was "Where Are We Headed?"

Other speakers and their topics were: Frederick A. Ballard, partner in the law firm of Kilpatrick, Ballard & Beasley, counsel for REMA, "A 1950 Survey of Our Anti-Trust Laws"; Cyrus W. Miller, executive secretary of the Refrigeration Industry Safety Advisory Committee, who outlined what has been accomplished to date by that group; and Gene Flack. sales counsel and director of advertising, Sunshine Biscuits, Inc., who presented one of his well-known inspirational sales mesanrea:

Social activities included a luncheon, cocktail party, banquet and entertainment.

CUTLER-HAMMER HAS NEW DAYTON OFFICE

Opening of a new sales office at 410 West First St., Dayton, Ohio has been announced by Cutler-Hammer, Inc.

The office has been opened to meet the expanding need for Cutler-Hammer motor control and allied electrical apparatus in the Dayton area, the company states.

P. L. Erickson, Cutler-Hammer sales representative in that area, manages the office as a branch of the company's Cincinnati district office.

PEERLESS Flash Coolers

 Fer superior performance specify all these PEERLESS products: Flash Plates, Flash Coolers, Dome and Unit Coolers, Ice Cube Makers, Fin Coils, Off Center Coils, Expansion Valves and Capacity Boosters. Write for Details.

FOR- 14 Retrigeration

• The wide shallow coils of Peerless Flash Coolers insure efficiency in the refrigeration of cut meats, flowers, and all products which must be guarded against dehydration. Large volumes of cooled air are delivered with

high relative humidity, making Peerless Flash Coolers ideal for cold storage boxes, walk-in and reach-in refrigerators, etc. Retailers, wholesalers, packers and other users obtain maximum product protection with these easily installed, overhead and out-of-the-way coolers. Copper tubing for Methyl Chloride, Freon or Sulphur Dioxide; aluminum for Ammonia. Standard and special

NOTE THESE ADVANTAGES

- Higher operating back pressure with low flat coils provides higher compressor capacity. More efficient, with reduced operating cost!
- Refrigerant circuit is continuous copper tube with aluminum fins—non-No Leaks!
- Internal Rifling swirls refrigerant over entire interior surface of tubing, insuring 100% internal wetted surface and 100% coil efficiency.
- Open-louvred drip pan permits free circulation of air through coil surface. Large volumes of cool tempered air flow downward by gravity over stored products.
- A Flash Cooler occupies space not to exceed 16" from ceiling.

 Quickly, easily installed by bolting convenient hangers to ceiling.

SOLD THROUGH LEADING REFRIGERATION SUPPLY WHOLESALERS

PEERLESS of AMERICA, INC.

1501 N. Magnolia St., Chicago 22, Illinois, U.S.A.

designs.

MITCHELL'S "FIRST" FOR 1950



First unit of the 1950 line of Mitchell room air conditioners rolls off the assembly line of Mitchell Mfg. Co. in Chicago, as a trio of company executives look on. Left to right are: Edward G. Doris, executive vice president; John Jennings, chief engineer, air conditioning division; Eugene A. Tracey, vice president, air conditioning division.

YORK EXEC HONORED

James Keith Louden. vice president and assistant to the president of York Corp. has been presented for his contributions to the advancement of scientific management.

The citation for Mr. Louden's award read: "James Keith Louden, industrialist, engineer, au-

thor, lecturer and counselor, is awarded the Gilbreth Medal for 1949 for his outstanding contributions to the advancement with the Gilbreth Award of the science of management, and specifically for the inception and organization of a comprehensive industrial engineering de-partment in one of our large and progressive industries."

Immediate Shipment On

Packaged'

Two great low priced cooling towers tailored to your "packaged" air conditioning needs—simple installation—trouble-free opera-tion—outstanding performance—low cost, long life—carried in stock in many principal cities.

MARLEY AQUATOWER . . . a "packaged", steel, induced draft cooling tower, ready to go — indoors or outdoors — 3 to 50 ton capacity. All nine sizes available for IMMEDIATE SHIPMENT. No assembly required. Bulletin AQ-50.

MARLEY SERIES 100 Natural Draft . . . completely pre-fabricated redwood, easy to assemble, multi-nozzle spray system, all bolted construction. Capacity up to 30 tons. IMMEDIATE SHIPMENT. Bulletin 100-50.

Thousands of Marley cooling towers in constant use throughout the world are your best assurance of complete satisfaction. Let Marley "know-how" help you. Write, wire or phone today.

Dept. CR-4

THE MARLEY COMPANY, INC.





MICH FOR OUR PO April 22, issue...

... OR WRITE FOR COMPLETE INFORMATION

FIXTURE

DEPT. RI-4 NILES, MICHIGAN

and AIR CONDITIONING . APRIL, 1950



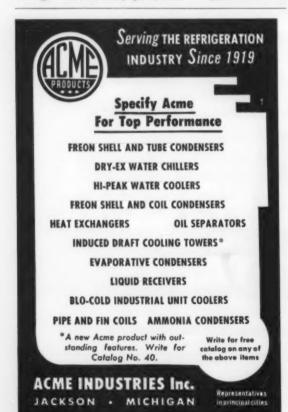
MORE and MORE RESTAURANTS SPECIFY THE NEW, SMOOTHER JOHNSON TOPS!

Johnson-Built Formica Counter and Table Tops are free from surface irregularities which former fabricating methods could not eliminate.

As one of the oldest, yet the most progressive of the exclusive Formica fabricators, Johnson offers the greatest opportunity for dealer profits. Write today for our catalog and prices.



69 North Street, Elgin 12, Illinois



NEW REFRIGERANT, CARRENE-7, DEVELOPED BY CARRIER MEN

Discovery of a new refrigerant, called one of the most significant recent developments in the field, was reported to members of the American Institute of Chemical Engineers, meeting in Houston, Tex., by two Syracuse scientists working on the research project for Carrier Corp.

The new refrigerant, known as Carrene-7, is expected to find wide-spread use in the air conditioning and refrigeration industry. Using the new refrigerant, it will be possible to do the same number of refrigeration jobs with fewer machines, and consequently will contribute to the general economy of the indus-

Carrene-7 is said to possess all of the desirable properties required for a safety refrigerant and also to permit a reciprocating compressor charged with the new gas to produce a substantially greater refrigerating effect. The immediate result of this characteristic will be to increase the effective capacity of available reciprocating compressors, without requiring that they be redesigned

Carrene-7 was developed after six years of investigation carried out under the direction of Dr. William A. Pennington, chief chemist and metallurgist of Carrier Corp., who was assisted in the work by Winston H. Reed, holder of a Carrier fellowship at Syracuse University.

The new refrigerant is a carefully proportioned mixture of two fluorinated hydrocarbons. It is what scientific circles term an azeotropic mixture, because it always boils at the same constant temperature corresponding to a particular pressure. Chemically it is composed of dichlorodifluoromethane (Freon-12) and unsymmetrical difluoroethane (Genetron-100).

Discovery of Carrene-7 came as a result of a search for a refrigerant which, when charged into a hermetic system designed for Freon-12 and 60-cycle power supply, would maintain the same capacity when 50cycle power was used. Carrene-7 has been found to be an ideal solution to the 50-cycle problem since it gives almost exactly the same capacity with 50-cycle current as F-12 does with 60-cycle current, or a capacity about 18% higher than F-12 where the same compressor is employed at the same speed.

The pertinent research leading to the discovery of Carrene-7 was described by Pennington and Reed in a paper entitled "The Evolution of a New Refrigerant." Part of the paper was devoted to the development of criteria for judging and predicting the properties of promising refrigerants. thus avoiding the impractical task of investigating all of the 9,000 known single compounds.

With the realization that a single compound was not likely to be found, the scientists directed their study toward finding a mixture which would boil at a constant temperature while the pressure remained the same. An essential requirement was that the atmospheric boiling point be between -27.5 and -30.7 F., and it was finally discovered that Carrene-7 had a boiling point which fell within range

The authors reported that many factors, in addition to refrigeration capacity, were considered in the development of the new refrigerant. Among these were chemical stability, flammability, toxicity, effect on metallic and nonmetallic materials used in refrigerating systems, and certain thermodynamic properties affecting per-formance. Carrene-7 satisfies all of the important requirements for a useful refrigerant, they reported. It is chemically stable, noninflammable, physiologically safe, and does not attack or corrode the common materials of construction. Its cycle efficiency and other thermodynamic properties are very similar to Freon-12.

Limited applications have already been made, and plans are being formulated for broad commercial IT TAKES ONE . . .

Continued from page 43

About a year ago a roadside grocer doing a \$150,000 volume in a Houston suburb, decided to either remodel or build. He asked for Coffey's opinion. Coffey suggested that he build. When it came time to buy the refrigeration units, the grocer called for Coffey.

Coffey prepared the floor plan for the store, which measured 60 x 90 feet. Provision was made on this layout for the following pieces of refrigeration equipment: two 10-foot sec-

"FRESH AS A DAISY"



To promote the proper merchandising of fresh produce, a 16mm movie film has just been released for showing by C. V. Hill & Co., Inc., Trenton, N. J.

"This film is no ordinary, dry, commercial motion picture—no long-winded sales talk," the company claims. "It's entertaining, humorous, fast-moving—but not without it's sound merchandising hints, worthwhile information and good advice. Just the thing for those who like to take their business with a laugh."

"Fresh as a Dalsy" was produced especially for food merchants association meetings. It will fit into any program, and requires but twenty minutes running time. The film will be loaned free for exhibit before any interested group. When the schedule will permit, a projector and company representative will be furnished for showings before audiences.

tions of double-duty case, one 7-foot case for frozen foods, one 8-foot fish and poultry case, one 12-foot meat case, three 6-foot sections of dairy case, two ice cream cabinets, and one 8 x 10 walk-in cooler.

When the grocer looked over the floor plan which Coffey submitted, he was utterly astounded by the amount of refrigeration equipment specified.

SALES AND SERVICE

ROTH Need the Facts



The proper installation of new equipment and satisfactory maintenance of old installations requires exact knowledge of relative humidity and temperature conditions. Bendix-Friez, manufacturers of the world's foremost meteorological equipment, makes a quality line of servicemen's instruments for heating and air conditioning work.

BENDIX-FRIEZ

Jugarodial

Precision Humidity and Temperature Indicator, Model 185

Hair-operated and calibrated to professional standards of accuracy by the maker of the world's finest weather instruments. Handsome, modern case—4" high, 5½" wide, 1\%" deep—desk or wall mounting. A genuine precision indicator reasonably priced.





BENDIX-FRIEZ

Hand Aspirated Psychrometer, Model HA/2

Pocket size, a new standard of convenience in measuring relative humidity. Accurate readings obtainable without special skill. Psychrometric readings can be taken at any point desired however inaccessible.

RENDIX-FRIEZ

Portable Humidity and Temperature Recorder, Model 160—

 $3'' \times 5''$ charts, 10 or 30 hour records. Modern design . . . handy for small space and difficult locations . . . built to meet unusual conditions.



WRITE

FRIEZ INSTRUMENT DIVISION of

1356 Taylor Avenue

Baltimore 4, Maryland

"I don't even carry enough mer- Expert Seles: Bendix International Division, 72 Fifth Avenue, New York 11, N. Y.



1950 BUSINESS BOOSTERS—by the LEHIGH TEAM

A COMPLETE LINE OF CONDENSING UNITS from 1/4 H.P. to 5 H.P.



1/2 H.P. Heavy Duty Air Cooled Unit

- * Package Air Cooled-Va H.P. thru Va H.P.
- * Heavy Duty Air Cooled-
- * Water Cooled-1/2 H.P. thru 5 H.P. * Combination Air and Water Cooled-1/2 H.P. thru 3 H.P.
- ★ Truck Units—¾ H.P. thru 2 H.P. ★ Automatic High Side Defrost Units
- **★ Units for Evaporative Condensers**
- * Water Cooled Condensers
- * Gasoline Engine Driven Units * Units for Specific Uses
- * Bare Compressors

Write For New Catalog and Price List

... the biggest news in 50 Years of COMMERCIAL REFRIGERATION!

Lehigh's New **AUTOMATIC HIGH SIDE** DEFROST CONDENSING UNIT

-for evaporator temperatures below 32°F. A sensational engineering development by the LEHIGH TEAM. Can be used on any evaporator. Compact—simple—fool-proof—LOW COST! Photo shows Lehigh automatic defrost controls on a 3/4 H.P. Heavy Duty air cooled unit. Completely factory assembled.

Don't Fail to Write For Bulletin DF-1038A or See Your LEHIGH Jobber

LEHIGH Engineering Is Improving TRUCK REFRIGERATION EFFICIENCY



Available also as an Automatic High Side Defrost Unit

Lehigh's sturdy, space-saving truck units are doing an outstanding job for many of America's largest carriers. If your problem is truck refrigeration the LEMIGH TEAM can place a wealth of valuable data at your disposal. The 1 H.P. Unit illustrated is only 13" high.

4 34 H.P. thru 2 H.P.

JOBBERS, DEALERS, MANUFACTURERS, SERVICE MENplace your name on our mailing list to receive all Lehigh literature and engineering releases.



Lehigh Manufacturing Co. Plant: LANCASTER, PENNA.

Export Department - 39 Broadway, New York 6, N. Y.

chandise to fill all those cases," he protested.

Patiently, Coffey pointed out to the merchant that he couldn't sell what he didn't have - and that customers coming to his store and only finding half their needs there would have to make a trip to a competitor. Further, he cautioned, such shopping at a competitive one-stop could easily become a habit.

The fixtures were installed.

The new store was to open on a Thursday. Tuesday night Coffey went out to see how his customer was getting along. The grocer was right-he didn't have enough items to fill the

After some more discussion, the grocer left it up to Coffey to order what stock the store should have. The next morning Coffey ordered over \$400 worth of various type cheeses to fill the dairy case, along with a good stock of prepared biscuit doughs.

Coffey also was on hand to arrange the displays for the opening. Saturday morning, the grocer had to reorder cheeses. He had sold out completely.

Last year this grocer's volume went over \$400,000. The store has attracted practically every grocer for miles around. The owner has sold more units for Zerozone than are sold off the company's own display floor.

And this is only one such installa-

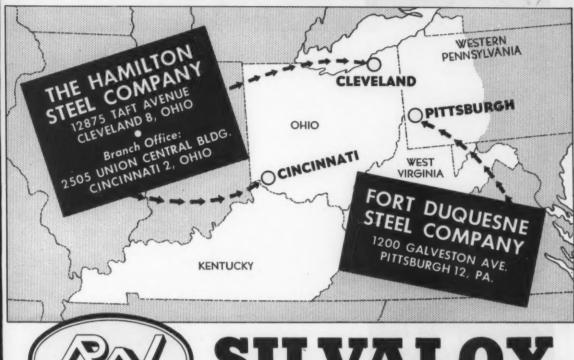
Coffey uses such satisfied customers with telling effect. If a prospect can't visualize from Coffey's blueprint just what his proposed new setup will look like, he is taken to a store where a similar installation has been made and is in operation.

After introducing the two merchants to each other, Coffey casually strolls away and leaves them together. In many cases the satisfied customer will sell his fellow grocer a bill of goods where a salesman wouldn't even get to first base.

SUNROC LANDS ARGENTINE ORDER

Sunroc Co. has announced receipt of an order from the Argentine Government for 15 of its Model SAFE Electric Water Coolers to be used in the Government oil fields. The order was received through M. W. Kellogg of New York, agents for the South American country.

An Important **EXPANSION**In Silvaloy Distribution!





SILVALOYS

A successful product attracts the most efficient distributors ... always. That's basically why SILVALOY Silver Brazing Alloys are now distributed by Fort Duquesne Steel Company and The Hamilton Steel Company, serving the important industrial areas indicated on the map above.

Their facilities and co-operation mean stocks and data when and where you need them... but their service goes beyond sales. Long years of experience enable them to supply sound technical advice and to work hand-in-hand with you in determining the most suitable and economical alloy for your purpose. They are good people to know and depend on.

The more popular SILVALOY Silver Brazing Alloys are listed in the table at the right. SILVALOY 15 is a silver-copper-phosphorous alloy for brazing copper and copper alloys. The five other SILVALOY alloys are quaternary silver-copperzinc-cadmium alloys, covering the wide range of general brazing operations. For special applications we have a complete selection of other silver solders.

	SILVER CONTENT	MELTING POINT	FLOW POINT
SILVALOY 15	15%	1185°F	1280°F
SILVALOY 20	20%	1430°F	1500°F
SILVALOY 35	35%	1125°F	1295°F
SILVALOY 40	40%	1135°F	1205°F
SILVALOY 45	45%	1125°F	1145°F
SILVALOY 50	50%	1160°F	1175°F

APW No. 1100 Low Temperature Flux and APW No. 1200 Universal Flux recommended for use with these alloys.

THE AMERICAN PLATINUM WORKS

231 NEW JERSEY R. R. AVENUE NEWARK 5, N. J.

SELLS YOU To Your Customers



Make trouble visible with the only liquid indicator that fully indicates

FULL 360° VISION MAKING POSSIBLE A RAPID DIAGNOSIS OF OPERATING

ENGINEERED

By Service Men
For Service Men



PROVIDES

Positive indication of excess oil in the system

CEE-KLEER
Sight Driers are 100%
cleanable and refiliable.
A combination: Sight
Drier-Strainer-Filter
ALL IN ONE
Makes servicing Easier
Faster-Eliminates
guess-work.
BUILT "NOT TO
LEAK!

Contact your jobber or write direct for free descriptive literature.

CEE-KLEER PRODUCTS CO. 1335 Walnut St., Cincinnati 10, O.



FOR MAXIMUM

EFFICIENCY

USE

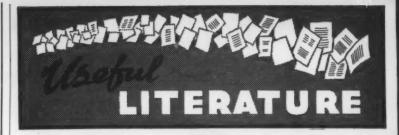
CHICAGO SEALS AND

VALVE PLATES



CHICAGO SEAL CO.

332 S. HOYNE AVE. CHICAGO 12, ILL.



The publications listed below are available to readers without charge. Simply list on the postcard in this issue the key numbers of the items you wish to receive. Your requests will be forwarded directly to the companies concerned.

D1—Refrigeration Accessories . . . A completely illustrated catalog of equipment and supplies for the refrigeration and air conditioning industry. Covers such items as gaskets, sponge rubber tubing, vibration eliminators, sight glasses, line check valves, purging hose, and special assemblies. Available from Techniflex Corp.

D2—Ice Maker . . A new 6-page pocket-size folder (No. 502) describing and illustrating the new Mills ice maker. Describes in detail the process by which this unit produces tube ice, cracked ice, or a combination of the two. Specifications are listed. Available from Mills Industries, Inc.

D3—Store Fixtures . . . A complete line of "Flexo-Step" unitary counter and shelf units for display and stocking of all non-refrigerated items in food stores and similar types of markets is described in this 4-page bulletin (No. 3249-5) available from Add Saley Co. Illustrations suggest many possible combinations of these units.

D4—Conditioning Units . . . A 12page bulletin covering the Marlo line of air conditioning units of both suspended and floor types for both winter and summer functions. Detailed photographs show all key features and major components. Complete capacity rating tables for each model. Available from Marlo Coil Co.

D5—Identification Tags... A 4-page folder (No. 49-14) describing and illustrating the applications of a line of metal tags for piping and valve identification. Available from Jas. H. Matthews & Co.

D6—Flareless Fittings . . . Bulletin F-10 containing illustrated unit-by-unit specifications and prices of the "Afco" line of all-purpose flareless fittings of steel, brass, and aluminum alloy. A tube fitting size table also is included. Available from Aircraft Fitting Co.

D7—Ornamental Grilles . . . A 48-page catalog (No. 33) presenting a large selection of ornamental grille patterns, including original designs providing a choice for every application. Special grilles with fixed or movable louvers also are included. Illustrated with photographs and dimensional diagrams. A vailable from Harrington & King Perforating Co.

D8—Condenser Tubes . . . Illustrated booklet (TB-329) on heat exchanger

and condenser tubes. Covers selection of appropriate tubing for specific service applications. Specifications and data are included. Available from Babcock & Wilcox Tube Co.

D9—Low-Temp Insulation . . . A 20-page comprehensive technical manual (No. RBH-1-50) on design data for "Rubatex" R-103-S Insulation Hardboard for low temperature applications. Detailed information for use by design and construction engineers is offered. Available from Rubatex Div., Great American Industries, Inc.

D10—Controls . . . Specific fit controls for more than 1000 individual refrigerator models are described in a new folder (CS-218) published by Cutler-Hammer, Inc.

LOOK to LARKIN

For Efficiency



LARKIN HALF-TURRET HUMI-TEMP

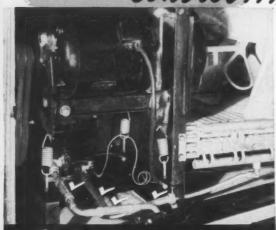
Efficient operation makes a product easier to sell on one hand; builds solid customer satisfaction on the other. Precision engineering—only the best materials—skilled crafts—manship—and almost 25 years experience in commercial and industrial refrigeration—all add up to higher efficiency for every Larkin product. And this means lower operating costs — important to buyer and seller alike.

Menufacturers of the original Cross-Fin Coll — Humi-Temp Units — Evaporative and Air Cooled Condensers — Air Conditioning Units and Colls — Direct Expansion Water Coolers — Steel Vacuum Plate Coils — Heat Exchangers.

LARKIN CULLS

\$19 MEMORIAL DR., S. E. - ATLANTA, GA

Here's effective VIBRATION control...



For small room air conditioners or huge institutional plants, CMH REX VIBRA-SORBERS keep compressor vibration and noise out of fixed lines. Tubing or piping free from the damaging effects of vibration gives better service and lasts longer... minimum noise transmission helps make satisfied customers. Made in sizes from ½" through 4", I.D.

REX Super-Service

IBRA-SORBERS

Steel and stainless steel units for other vibration services are also standard assemblies.

Write for specification sheets.



CMH REFRIGERANT CHARGING LINES

are light weight, long-lived, quality charging units for all types of refrigerants. Nondeteriorating, non-corrolive, non-collapsible, non-kinking and non-seeping. Other flexible metal hose types are available for loading and unloading refrigerant.



CHICAGO METAL HOSE

Leaders in the Science of Flexenics
MAYWOOD, ILLINOIS
Plants at
Maywood, Elgin and Rock Falls, Illinois
In Canada:
Canadian Metal Hose Co., Itd., Brempton, Ontario

and AIR CONDITIONING . APRIL, 1950

WE TAKE CARE OF



Eastern

CONDENSATE

DISPOSAL UNIT



Designed for the air conditioning field, here is a completely automatic, foolproof unit that removes condensate fluids from the receiver tank and pumps them to an outside drain. Simple to install . . . Low operating cost . . . Totally enclosed motor . . . Compact, rugged, rustproof construction . . . Quiet and reliable in operation.

SPECIFICATIONS

Tank — Approximately 1½ gal. capacity with ½" inlet, ½" outlet. Brass with black enamel outside. Pump—Bronze centrifugal pump. Delivery app. 4½ GPM at O PSI and shut off of 12½ PSI. Motor — 1/40 HP 3450 RPM, single phase, 60 cycles, 115 volt, totally enclosed, ball bearing, capacitor start motor.

Control — Controlled by a float operated switch, so set to pump out app. 0.8 gal. of condensate at each operation. Built-in check valve prevents the outlet line from draining back into the tank. Overall Dimensions—5¼" wide; 9%" long, 12 15/16" high. Weight 21 lbs.

Investigate Eastern's Proven Pumps for ICE CUBING MACHINES

Designed for continuous duty under severe operating conditions, the Eustern Model D-11 Pump is a heavy duty centrifugal pump. Size: 10" x 5½" x 5". Weight: 18 lbs. Power: 1/4 HP, heavy duty, split phase, fully enclosed, induction motor. Available in 110 or 229 volts: A.C. Maximum output: 8 GPM at zero pressure: Maximum pressure: 14.5 PSI at shut off. Furnished in special allays for hazardous service. Built for denandable service.



MODEL D-11

WRITE FOR COMPLETE CATALOG

Eastern INDUSTRIES

N C O R P O R A T E D

296 ELM STREET

MEW HAVEN. CONN.

Kelvinator offers

with a size and type condensing unit to



NEW FOR

10 HERMETIC MODELS

up to and including 1/2 H. P.

Complete line of 1950 Condensing Units now available for immediate shipment.



McLuiseator- dependable, cost-saving

COMMERCIAL DIVISION, NASH-KELVINATOR CORP.

exact selection!

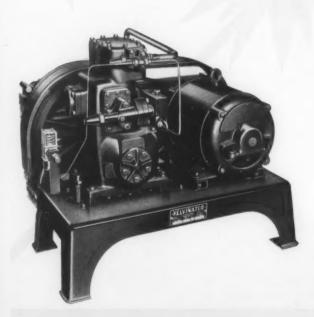
exactly meet your refrigeration needs!

1950!



OPEN MODELS

Air-Cooled ¼ to 3 H. P. Water-Cooled ½ to 5 H. P.



For complete details see your Kelvinator distributor or write for new commercial catalog.

refrigeration units for commercial installations
14250 PLYMOUTH ROAD, DETROIT 32, MICHIGAN

WEHAVEIT!

ANY AND ALL TYPES

AVAILABLE LOCALLY



• Count on Aerovox for that motor-capacitor replacement! You'll get the RIGHT type in a jiffy. First, use the up-to-date Aerovox listing to select the right type — either a Universal or an Exact-Duplicate number. Then go to local Aerovox distributor who carries a representative stock to supply your needs, QUICKLY.

• Ask for the latest Aerovox motor-capacitor literature. Or write us.



FOR RADIO-ELECTRONIC AND

INDUSTRIAL APPLICATIONS

ÄEROVOX CORP., NEW BEDFORD, MASS., U.S.A. Export: 13 E. 40th St., New York 16, N.Y. - Cable: 'ARLAB' In Canada: AEROVOX CANADA LTD., Hamilton, Ont.

NEW Products

For further information on any of these products, simply list on the postcard provided in this issue the key numbers of the items in which you are interested. Your requests will be forwarded directly to the companies concerned.

Custard Freezers • • PD-1

Product: "Freez-King" line of frozen custard machines.

Manufacturer: Freez-King Corp., Chicago, Ill.



Features: A low priced line of continuous custard freezers for every application, from small stores to large drive-ins. Both counter and floor models available. Freezers yield from \$10 to \$30 per hour in sales, depending upon model. Model 502-BW (shown) measures 26x48x70 inches and yields from \$20 to \$30 per hour.

Walk-In Unit • • • PD-2

Product: Complete cooling system for walk-in coolers known as "Kool-Rite Plug Panel".

Manufacturer: Kool-Rite Co., Hudson, Wis.

Features: Complete system is mounted on a removable panel that fits into a 22x26 inch opening in the wall of the walk-in cooler, with high side on exterior and low side on interior of the cooler. High side is separated from low side by a 5-inch wall insulated with 3½ inches of Fiberglas. All systems are of her-

metic-capillary tube type and refrigeration will start immediately upon plugging cap into wall receptacle. It



is not necessary to open any valves to start system, nor is it necessary to pump system down if it is desired to shut off refrigeration. Single units can be furnished to cool cabinets 10x10 feet or smaller. Larger coolers will require two or more units. Available in nine sizes and capacities, ranging from a 1/3-hp system with 2230 Btu/hr capacity to a 3½-hp system with 5950 Btu/hr capacity.

Combination Unit . PD-3

Product: Walk-in, reach-in combination refrigerator.



Manufacturer: Super-Cold Corp., Los Angeles. Features: New case is built in two dove-tailing parts which will enter any 38" door without requiring special arrangements. Two sections are joined at site of installation; angle socket wrench is only tool needed. All refrigeration is installed at factory. Baked enamel exterior, extraheavy insulation, fluorescent lighting, aluminum corner and moulding trim; triple non-sweat glass doors with heavy-duty hardware, adjustable shelves. New case is called "the Aristocrat."

Self-Service Table • • PD-4

Product: Refrigerated display table for island self-service merchandising of food products.



Manufacturer: Tyler Fixture Corp., Niles, Mich.

Features: Merchandise readily accessible at sales level and visible from all four sides. Self-contained and can be moved readily to any location in the store. Drain is not required because defrost water is evaporated automatically. Maintains proper temperature for wide variety of food products. Measures 32 inches wide, 60 inches long, and 39 inches high.

Gauge Set • • • • PD-5

Product: Refrigeration testing gauge set.



Manufacturer: Jas. P. Marsh Corp., Skokie, Ill.



Features: Consists of a compound retard gauge and a pressure gauge for use with manifolds and other testing. Both gauges have heavy-duty bronze bushed movements and are calibrated to the extreme accuracy of plus or minus 1% of reading over their entire ranges. Knife edge pointers facilitate close reading. Both gauges have "Recalibrator" which enables user to restore accuracy of gauge that has been knocked out of adjustment by simply turning a screw on face of the gauge. Both gauges

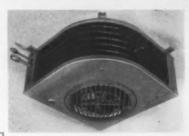
mounted in 2½-inch polished brass cases with bevelled glass crystals.

Corner Coil • • • PD-6

Product: "Cornair" refrigeration coil specially designed to fit into corner of small walk-in or large reach-in refrigerators.

Manufacturer: A. H. Witt Co., Los Angeles, Calif.

Features: Fits snugly into corner of refrigerator at ceiling level, where it is out of the way and occupies no valuable storage space. Can be installed flush against ceiling and sides because air is taken in through



Self-Serve Frozen Food Cabinets
6 ways better



AC-1350

- Complete Vapor Seal
 reduces tempera-
- Instant Defrosting
- Self-Contained Condensing Unit
- Refrigerated Divider Plates
- Sub-Zero Temperature
- Visual Air Shields GF-1150



FREEZ-RITE

GF-1150
Baked enamel and
polished aluminum
trim. Holds 480
standard size packages, 10.6 cu. ft.

AC-1350 Dual-Serve model holds 720 standard size packages, 13.5 cu. ft, Here are frozen food cabinets designed with better merchandising in mind. These cabinets have increased frozen food sales many times over conventional cabinets.

Freez-Rite makes shopping easier, faster . . . makes possible largest sales volumes, largest profits.

Choice Distributor Territories Still Available

BAILEY and PERKINS COMPANY

2869 E. Grand Boulevard - Detroit 2, Michigan

bottom of housing and discharged through curved edge of coil which distributes air through a 90-degree radius. Fan and fan motor are mounted on a rigid cast aluminum grille, and both are readily removable. Center of gravity being forward of center, no hangars are required at rear of unit, so all three hangars are located at most accessible points. Complete bottom pan can be removed by removing two nuts and two screws. Housing is aluminum. Contains efficient heatexchanger and accumulator. Available in 420 and 560 Btu capacities at 1 degree t.d./hr to balance with 1/2 and 3/4-hp condensing unit when operating at 10-degree t.d.

Refrigerant Can Valve • PD-7

Product: Special valve for adaption to refrigerant dispensing cans.

Manufacturer: Superior Valve & Fittings Co., Pittsburgh, Pa.



Features: Special fittings, a piercing mechanism, quick-couplers, and charging hoses have been adapted for use with the new packaged refrigerant can. New valve is small packed-

type shut-off valve and incorporates a ¼-inch female SAE coupler. Incorporates a special safety feature that allows any part of Freon to be expelled without having to dispense the entire can. Valve is reusable and will be stocked by refrigeration equipment wholesalers.

Cooling Tower • • PD-8

Product: "Hydro-Miser" cooling tower.

Manufacturer: Larkin Coils, Atlanta, Ga.

Features: Employs entirely new type of wetted surface comprised of grid-work of electro-tin-plated bronze wire screens. Each screen forms slight



angle. Water sprayed under pressure onto screen clings to fine mesh of wire. Induced air, pulled in from bottom of cooling tower by centrifugal type fans in top, flows on both sides of each individual screen in the gridwork, rapidly evaporating and cooling the water. Gridwork is housed in hot-dip galvanized steel case and entire unit is easily removed for cleaning. Compact design. Ten single and double fan unit models are available, ranging in capacity from 3 to 50 tons.

Ice Maker Filter • • PD-9

Product: "Taste-Master" water filter for use with all types of ice makers, especially in areas where poor water conditions exist.

Manufacturer: Filtrine Mfg. Co., Brooklyn, N. Y.

Features: Can be "packaged" into ice maker to completely prevent all rust discoloration of ice and frozen-in foreign particles. Also eliminates all alien tastes, including chlorine, that would impair flavor of beverage in which ice is used. All such substances are completely excluded from ice maker, thus keeping interior of

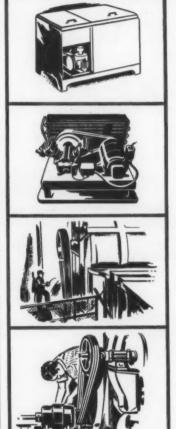


unit free from sludge and reducing service complaints. Light, compact, easy to install. All brass construction, guaranteed for 5 years, Contains patented element which collects all foreign particles by process of molecular attraction. Weighs 8 pounds, measures 5 x 10 inches.

Tube Expander • • PD-10

Product: "Handy Expando" tube end expander tool,

Manufacturer: Knuth Engineer-



Your NEW Gilmer

Belt Bible is ready it's your guide to more V-Belt Sales!

Here's the latest "Belt Bible" from Gilmer!—it's a fact-packed reference guide to Gilmer V-Belts for household and commercial refrigeration units: bottle, milk, and beverage coolers; ice cream cabinets; air-conditioning units; air compressors. In short, a complete V-Belt library inone convenient volume! Get your copy today. Write, requesting the new Gilmer Refrigeration V-Belt Guide!

The HOW and WHERE of better V-Belt business

HOW: Keep your Gilmer stock complete—a variety of V-Belts and also the other refrigeration necessities in the Gilmer line; tape, shock-pads, wire, hose, packing.

WHERE: Industrial plants, office buildings, theaters, restaurants, super markets, grocery stores, hospitals, institutions, department stores, ice cream manufacturers. In short, any business that uses refrigeration can give you business!

Buy Gilmer Products through your Gilmer Distributor

L. H. GILMER COMPANY

TACONY, PHILADELPHIA 35, PA., U. S. A.

Division of United States Rubber Company













ing Co., Chicago, Ill.

Features: Expands soft and hard copper, aluminum, and steel tubes with just a few turns of the tool's handle, within seconds after tube has been placed in the jig. Working to a close tolerance, this tube is simply slipped onto the connecting tube, eliminating the need of a coupling sleeve, and soldering is done in one half the time normally needed with only one joint to solder. With the elimination of this additional joint, leak potential is cut in half. Weighs



less than 10 pounds, and comes equipped with dies necessary for ex-

pansion of $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$ and $\frac{3}{4}$ inch tubes $\frac{1}{8}$ of an inch.

Test Cord Set · · PD-11

Product: "Unitwire" test cord set for on-the-spot electrical testing of refrigerators.

Manufacturer: United Mfg. & Service Co., Milwaukee, Wis,



Features: Designed for quick and positive testing of the continuity and grounds of starting and running windings of electric motors up to 1/3 hp and also for testing continuity of entire electric circuits, including control, relay switch, starting capacitor, and wiring system. When used with fuse or fusitron, set will test for faulty hermetic units, thermostatic switches, capacitors, and can be used to free stuck-up hermetic units. Has simple break-in connection to place a capacitor in the proper circuit to start capacitor motors. Set includes: parallel type cord with standard attachment cap; junction block receptacle with 5-amp switch; adapter socket to accommodate fuse, fusitrons, or lamp, and which inserts into junction block receptacle; 3 clip-on leads for run, start and common, and 2 break-in clip-on leads for capacitor connections, all with rubber insulators. Hot stamped sleeves identify each lead.

THE ONLY WAY YOU CAN REACH THIS MOISTURE

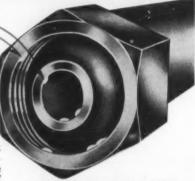
An exaggerated view of tubing and fitting, showing moisture clinging to walls, pores and imperfections.

It is a well-known fact that moisture clings to metal surfaces. This is true whether the metal is cast, drawn, forged, turned or rolled. That means there are likely to be hundreds of tiny droplets of moisture clinging to the inner surfaces of any refrigerating unit. Tubing walls are no exception. When some of this "clinging moisture" breaks loose, it is likely to cause trouble.

The Way to Cut Down 7-Day Callbacks

You are often unjustly blamed when some "clinging moisture" breaks loose soon after your service call. The best way to avoid these costly call-backs is to remove the moisture from all parts of the unit.

Unlike other methods, the liquid drier Thawzone reaches the entire unit. No matter where the moisture is, Thawzone finds it. Wherever water goes, Thawzone goes, too. Furthermore, it is the only



product that actually destroys moisture. It is the sure way to clear up moisture trouble for to-day, tomorrow and next month.

Use Thawzone in Any Freon or Methyl Unit

Thawzone can be used in any unit containing "Freon" methyl chloride, methylene chloride, "Carrene" or isobutane. Use 1 teaspoonful (½ oz.) per pound of refrigerant. Use half as much in hermetic units. Your wholesaler has Thawzone. Highside Chemicals Co., Clifton, N. J.

THAWZONE®

The Only Drier That Destroys Water... and Reaches <u>All</u> of it

SELLS MILLS ON COAST

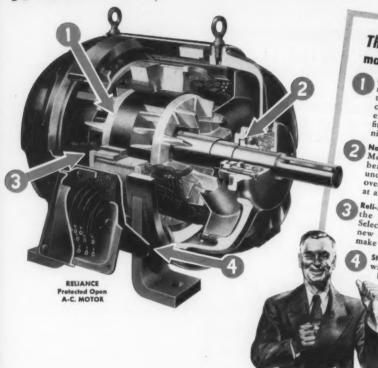
Thermal Products, Inc., Los Angeles, Calif., has been appointed distributor for the Mills Industries line of compressors and condensing units in the southern California area.

Peter H. Askew, president of Thermal Products, is well known in the refrigeration field.

BUY FROM YOUR REFRIGERATION WHOLESALER

. are made better

to deliver DEPENDABLE POWER-LONGER!



These Four Features Alone make RELIANCE the motor for you!

Dynamic Balancing — Precision Fits — Every motor is dynamically balanced by skilled technicians using latest electronic-principle equipment. Machining of parts to exacting tolerances guarantees precision fits throughout. Result: a smoother-running, longer-lasting motor!

No Lubrication Worries - Precision Bearing Mounting, with double-shielded ball bearings, assures longer bearing life under all normal conditions, whether overgreased, undergreased or not greased at all. "You can't grease 'em wrong!"

Rell-X Insulation furnishes a new high in the protection of stator windings. Selected materials, exclusive methods and new continuous-sequence applications make this the unfailing insulation!

Steel for Strength-Steel construction, with electrically welded joints, combines maximum strength with mini-

Reliance has a way of building motors that must be seen to be fully appreciated. Any time we can take a motor user through the modern plants where Reliance Precision-Built Motors are made, we can be reasonably sure of another good Reliance customer. We would be delighted to have you make this visit. But if it isn't practical, call in your nearest Reliance representative and see the convincing facts he can show you on the precision methods that produce these truly superior motors. Now available from 3/4 to 300 horsepower.

Sales Representatives in Principal Cities

HOW TO SELECT THE RIGHT MOTOR

Here's a book which digests all the information you should have in selecting the

motor that's just right for any job. New torque and current standards recently adopted by the National Electrical Manufacturers Association for A-c. motors are tabulated and explained. And these are further supplemented by more detailed performance data on Reliance Precision-Built Motors. Write today for this important new Motor Data Bulletin, B-2101.

ELECTRIC AND ENGINEERING CO.

"Motor-Drive is More Than Power" .

1113 Ivanhoe Road, Cleveland 10, Ohio

PUSH PROFITS . .

Continued from page 33

over the long haul in terms of increased equipment sales,

Not only does he indoctrinate his salesmen with this approach, but Hayes himself often will drop in on a customer or prospect completely unannounced, just for the purpose of chinning with him a bit and perhaps pointing out to him how he might improve the operations of this or that department by moving a fix-

ture from here to there or by rearranging a product display in such a manner. And any gratuitous information which he does pass out in this way almost invariably is listened to with the respect which his experience and his knowledge commands.

Steeped as Hayes is in the principles and practices of food merchandising, he occasionally gets the feeling that he is not as well informed in this field as he should be. Whenever this happens, he immediately takes steps to remedy the situation.

Last summer, for instance, Hayes

— who for years has watched with extreme interest the growth and development of the self-service trend in fresh meat merchandising — decided that he needed a first-hand refresher course to bring him up-to-the-minute on this phase of food retailing. So he took leave of his own business for a couple of weeks to make an extended swing through Illinois and Indiana, closely observing the self-service meat operations of stores in all classes of neighborhoods and all types of towns.

The information which he obtained on his trip helped materially to crystallize his conviction that self-service meat retailing was here to stay. And ever since then he's been "spreading



the gospel" with intensified zeal among his own customers and prospects,

That instance is typical of the lengths to which Hayes will go to increase his own knowledge of food retailing so that he can pass it along to the food merchants with whom he and his salesmen work.

Hayes, however, does not restrict his dissemination of merchandising wisdom to such personal contacts. He also spreads the benefits of his knowledge through signed articles published in such food journals as "The Grocers' Spotlight" and in his own external house organ, "Self Serve News."

This latter publication, which is issued by the Detroiter firm about every 60 days, is circulated among some 6000 market operators on the company's list. Published in tabloid size and format it is filled with actual



experience stories, liberally illustrated with photographs, pointing up the way in which various of the firm's customers have improved their merchandising operations through the installation of more modern refrigerated fixtures, the use of more effective store planning, or the application of other improved food retailing techniques.

Ads Are Two-Edged

Detroiter employs a similar "here's how it's done" theme in the full-page ads which it occasionally runs in local grocer publications. Usually these ads are inserted upon the occasion of the opening of some new Detroiter-equipped market, and serve both as a flattering send-off for this particular customer and as a come-on for other prospects who might be contemplating the modernization of their present facilities or the erection of new units.

Hayes further solidifies this wealth of food retailing know-how in an annual "Food Fair" staged at the company's headquarters. Various food suppliers are invited to contribute product displays—all effectively set off by Detroiter equipment, of course — and experts in various phases of food market operation are obtained as guest speakers.

Food Clinic Pays Off

The whole thing becomes a sort of clinic on the most modern techniques of food merchandising. And, far from incidentally, it also results in the creation of a lot of customer good will and the sale of a lot of refrigeration equipment! Some 7000 grocers and their employees attended Detroiter's most recent three-day food show.

Getting back to the matter of training salesmen, which he personally regards as one of the most important phases of his business, Hayes starts out by carefully selecting experienced men—experienced not in refrigeration, mind you, but in the food field. Two of his salesmen, for instance, were grocers before they came to work for Detroiter. Another was a butcher.

"It's easy enough to teach these men all they need to know about the technical side of our equipment," he reasons, "and they already know from their own experience the prac-

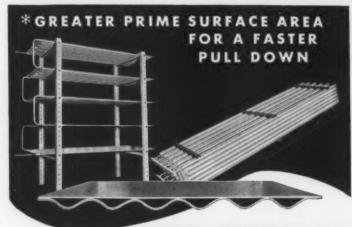
tical side of what this equipment can mean to the food merchant."

Hayes not only imbues these men with as much of his own knowledge as possible, but in addition he sees to it that they take advantage of every possible opportunity for more formal schooling to keep themselves abreast of the latest wrinkles in the food selling game. When the company started concentrating its efforts on the self-service meat field, for instance, the salesman who previously had been a meat cutter was sent to Toledo to study under Jack Dickie,

outstanding authority in this field, at National School of Meat Cutting.

Fortified with this unusual background of experience and knowledge, Detroiter salesmen are well qualified to be of practical assistance to their customers and prospects. Often their sales calls are not so much product presentations as informal talks with market operators on matters of operating procedure.

These salesmen not only know what should be done, but they also know what other merchants in the community are actually doing. And



*A KOLDENOLD DEVELOPMENT

You get dependable refrigeration at lower cost when you use refrigeration plates with "Serpentine" design. These lightweight plates cool large areas quickly yet take up less room than conventional designs. They have no internal tubing or piping so their weight per square foot is extremely low, and installation is simplified.

One outer surface of the plate is flat and the other is embossed to form the channels through which the coolant flows. This provides direct refrigerant contact and the equivalent of 100% prime surface. The size of the refrigerant pas-

sage and the smooth contour of the return bend reduces pressure drop to the absolute minimum. Plates can't possibly become clogged or oil logged.

The flat, top surface of Serpentine Plates adapts itself readily to the construction of shelves and stands and banks to add extra convenience to holding and freezing rooms. Once installed, they provide a lifetime of efficient, dependable refrigeration performance. For proof . . . just ask anyone who uses one of the half million Kold-Hold Serpentine Plates in use today.

See your local refrigeration supplier or write us for details



KOLD-HOLD

protects every step of the way

KOLD-HOLD MANUFACTURING CO., 503 E. Hazel St., Lansing 4, Mich.

they pass this information along whenever they feel it will be of help.

"Sure, we're full of gossip," Hayes admits, "because gossip is the lifeblood of the food market trade. But there is one important distinction about our gossiping—we only gossip when we know what we're talking about."

To keep his salesmen from becoming "hungry" for sales, and therefore being tempted to substitute high pressure "product pushing" for the more effective educational approach, Hayes has set up all of his men on a

salary-plus-bonus basis and has arranged it so that each man operates in a protected territory.

Hayes is a firm believer in the fact that to do a really effective job of selling commercial refrigeration equipment to the food merchant, you also have to be prepared to supply all his other equipment needs, from counters and shelving to scales and grinders.

Detroiter's own completely equipped shop, capable of turning out anything at all in the way of nonrefrigerated fixtures, provides the answer to this first problem. And a tie-in arrangement with Standard Market Equipment Co., which shares Detroiter's quarters, provides the second.

LOCKER PLANT USES HOT GAS DEFROST

A multiple system comprised of four 5-hp Par condensing units interconnected with an evaporative condenser and a common receiver has been installed in the Boswell Locker Plant at Boswell, Ind., by Bee Cee Co., refrigeration and air conditioning sales and service organization of Lafayette, Ind.

D. V. Baugher, Bee Cee's owner, reports that the design and layout of this system was developed strictly by his organization.

The hookup features a hot gas defrost system. Temperature is maintained by thermostats and solenoids which start or stop different compressors as the load requires.

Gas and oil equalizing lines interconnect each crankcase to maintain proper oil levels. Pressure drop in the suction line is the same from the manifold to each compressor.

The main hot gas loop was incorporated in the oil separator line. Each unit and thermostat circuit has a hand-off-automatic switch which permits flexibility in operation.

4 MORE G-E DEPOTS

Issuance of renewal parts depot franchises to four additional firms has recently been announced by the Air Conditioning Department of the General Electric Co. The firms are R. Cooper, Jr., Inc., Chicago; General Air Conditioning and Heating Co., Oakland, Calif.; Davey Sales Co., Akron, Ohio; and Allied Supply Co., Dayton, Ohio.

NAMED SALES AGENT

Engineering Sales Co., 171 Audubon Blvd., New Orleans, has been named a special sales agent in refrigeration and air conditioning equipment by the Patterson-Kelley Co., East Stroudsburg, Pa., manufacturer of heat transfer equipment.

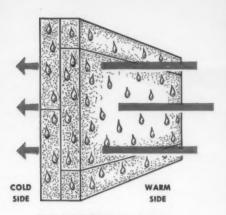
BUY FROM YOUR REFRIGERATION WHOLESALER



CORPORATION

PAR COMPRESSOR DIVISION PAP

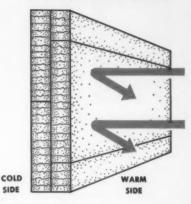
YOU'LL BUY PAR



WET INSULATION lets heat inmakes compressors run overtimo



DRY INSULATION keeps heat out saves compressor wear and tear.



COMPLAINTS BEGIN WHEN INSULATION GETS WET

High electric bills and compressor failure all too often can be traced to wet insulation. For when insulation gets wet, heat pours through the cold room wall. Compressors must work overtime to pull that heat out again.

To make matters worse, if temperatures are low enough the water inside the insulation freezes. Then cold room walls buckle, concrete floors heave, and the entire job fails.

No insulation is wet when you first apply it, but after the refrigeration is turned on, some pick up water in a hurry. To avoid the troubles that wet insulation causes, sell Armstrong's Corkboard and apply it properly. The high natural moisture resistance of this material, combined with Armstrong's erection specifications, keeps that damaging water out.

Corkboard is made of small granules of pure cork, compressed and baked in board form. Each granule is made up of air-filled cells-20,000,000 to the cubic inch. These cells fit so snugly together that there's no space between them for water to collect. Their tough, resinous walls seal out moisture.

Armstrong's Corkboard is fast and easy to handle, too. It's strong-can be used for interior walls without any supporting structure. Finishes bond securely to cork surfaces. Corkboard will not shrink, swell, warp, or harbor vermin. For complete information on this insulation that stays dry longer, call the Armstrong office nearest you or write direct to Armstrong Cork Company,

5304 Concord St., Lancaster, Penna.



ARMSTRONG CORK COMPANY

Makers of Armstrong's Corkboard and Cork Covering

ABOUT People

Chester K. "Chet" Litman has been elected vice president of Koch



Refrigerators, North Kansas City, according to announcement by Millard Mayer, president. Litman came to Koch in 1935 after graduation from Harvard, and has been connected

with sales, sales engineering and production since that time. Litman, 35, is a registered professional engineer, with several patents to his credit; much of the present Koch styling is credited to him. He has been plant superintendent since 1942.

Working with Litman in his new post will be Bill McShane, sales manager; Frank Leininger, assistant; Larry Frank, in charge of overseas operation; Sam Glass, advertising manager, and Glen Cargyle, assistant. Oscar Marr handles production, and Clarence Masters supervises product development.

J. W. Hart has been elected president of McCray Refrigerator Co., and has assumed active management of the company. Mrs. E. E. McCray, formerly president, has been elected chairman of the board to succeed





Hart

Abbott

Paul W. Miller, resigned. Hart has been with McCray for 43 years, and has filled every executive office except board chairman.

Robert E. Abbott has been

named McCray's vice president in charge of sales to succeed R. J. Rehwinkel, who has been granted a leave of absence. Willis R. Clouse has been appointed treasurer to succeed A. P. Gilliland, resigned. H. B. Vogt is the company's new sales manager. and C. H. Ziebell is assistant sales manager. Abbott has been with Mc-Cray since 1934, and most recently was sales manager of wholesale accounts. Clouse formerly was comptroller. Vogt had previously been with Hussmann as sales promotion manager, and Ziebell, a 30-year Mc-Cray man, has occupied a variety of sales department positions.

Ludwig Emde was elected president and general manager of Temprite



Products Corp., Detroit, at the annual meeting of the company's board of directors, succeeding W. R. Clark, who will become chairman of the board. Re-elected secretary-treasur-

er was P. Fred Lesley.

Emde left Worthington Pump & Machinery Corp. approximately 5 years ago, to join Temprite as vice president and general manager, and has been directing Temprite's active expansion program since that date. He is well known in the refrigeration industry and has served as chairman of various committees of the Water Cooler Section of the industry.

C. P. Lee has been appointed refrigeration engineer for Warren Co., Inc., Atlanta.

Lee will direct all phases of design and development for Warren's commercial refrigeration equipment. He is the inventor of the cross-fin coil, which was promoted by Larkin Coils, and was Larkin's chief engineer from 1935 until 1943, when he joined Warren. Until his present appointment Lee was vice president of Warren Cooler Corp., Atlanta.

John S. Mackinlay has been appointed manager of product service of



the air conditioning department, General Electric Co., it was announced recently by L. E. Thompson, manager of parts sales and product service.

Mackinlay

joined General Electric in November, 1949. He was formerly associated with the Penn Electric Switch Co., Goshen, Ind.; McCray Refrigerator Co., Kendall-ville, Ind.; and Jack & Heintz Co., Cleveland. He is a member of the ASRE and RSES.

Olan S. Reese, formerly with Houston University as instructor in refrigeration and air conditioning, has joined D. C. Lingo Co., Houston, Tex., refrigeration parts wholesaler, as consulting engineer and salesman.

The S. A. Hirsh Mfg. Co., Chicago, manufacturer of Hirsh shelving and uprights, has announced the appointment of **Frank W. Nittel** as east central sales representative. Nittel, who is well known in midwestern food circles, will temporarily operate out of Chicago.

Willis W. Mansfield has been appointed factory manager of Penn



Electric Switch
Co., Goshen, Ind.,
as successor to
the late Mark D.
Disosway, according to Malcolm E. Henning,
executive vice
president and
general manager.

Mansfield has been with the Penn Switch for 15 years, joining the organization in 1935 as chief draftsmen. In 1938 he was appointed specifications engineer. He resigned in 1944 to become administrative engineer for the Micro Switch Corp., Freeport, Ill., returning to Penn in 1945 as chief planning engineer. Shortly thereafter he became production manager, and during the illness of Mr. Disosway was acting factory manager.

Appointment of Lowell G. Collins as sales promotion manager, and L. Jack Gage as commercial advertising manager has been announced by J. C. Bonning, advertising manager of the Kelvinator Div. of Nash-Kelvinator Corp.

Collins joined Kelvinator in 1946





as commercial advertising manager, following three years' wartime service with the U. S. Navy. Before the war he served in advertising and sales positions with Sears, Roebuck & Co., Chicago, Ill.; B. F. Goodrich Rubber Co., Akron, O., and the Wincharger Corp., Sioux City, Ia.

Gage has been with Kelvinator 24 years, in the service and advertising departments. He has been technical copy supervisor with the advertising department since 1944.

Harry E. Lewis has been named assistant comptroller of Worthington Pump & Machinery Corp., Harrison, N. J. Lewis succeeds the late Joseph A. Schallenberg.

International Register Co., coin meter manufacturer of Chicago, has



announced eral changes in its sales staff. E. J. Bohnen, formerly sales manager, has been appointed vice president in charge of sales, and H. H. Rosenheim has been promoted to as-

sistant sales manager.

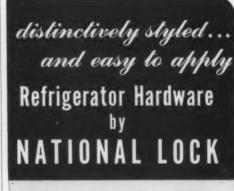
R. Bedford and R. Clark have been added to the company's sales staff as field representatives.

David Young has been appointed manager of the commercial department of Judson C. Burns, distributor of General Electric commercial refrigeration in the Philadelphia territory, and A. A. Toohey, formerly commercial department manager, has been named head of the company's Croslev builders' division.

S. D. Clarke, Jr., has been named purchasing agent of Kerotest Mfg. Co. He has been with the valve manufacturing firm since 1942, Clarke replaces E. T. Adams, who has been appointed district manager of the Houston sales territory.

Emil Skarda has been named manager of the Reco international division of Refrigeration Engineering Corp., Philadelphia. Skarda was until recently export manager of Wilson Refrigeration, Inc.

59-213



First Choice with Manufacturers of ...

- . REACH-IN CABINETS
- BACK BARS
- DISPLAY CASES
- DRAFT BEER EQUIPMENT
- BOTTLED BEVERAGE COOLERS
- STOKERS
- MILK COOLERS
- FLORIST BOXES
- COIN-OPERATED REFRIGERATED DISPENSING MACHINES
- LOW TEMPERATURE HORIZONTAL OR VERTICAL CABINETS
- MANY OTHER TYPES OF REFRIGER-ATING EQUIPMENT

ASK YOUR JOBBER FOR INFORMATION AND PRICES











Refrigerator Hardware Division

PLANNING FOR PROFIT ...

Continued from page 38

two for the distributor, one for the field man, and one for the factory's permanent file. Of his two, the distributor gives one to the prospective customer.

Most of the company's distributors have complete sets of the miniatures, including the graphed planning table. Distributors pay part of the cost of these sets, the factory the balance.

Where the distributor is equipped

to do so, he duplicates the store layout from the photograph, and invites the prospect in to see it. The prospect may, if he wishes, start from the factory layout and move or shift the pieces as he sees fit.

Almost every store operator planning a new store or a remodeling job reacts to the miniatures much like a small boy with his first electric train. He's likely to spend hours fiddling with the fixtures, moving them about as he wishes.

In his imagination, he "sees" the store as it will look when finished. He gets to feel an ownership. Moving the miniatures around, the prospect gets the feeling that he is taking part in the planning—even though he will in all probability wind up with all the pieces just where the "experts" had placed them in the beginning. Anyway, it's harder for a prospect to turn down a proposition after he's worked on it himself.

Do distributors value the miniatures? You bet! One distributor had an offer for his set from the store-planning manager of a large grocery chain, but wouldn't turn loose until he'd been assured that he could get another set right away. The company saw that he got it.

In another case, a food market operator hopped into his own plane and



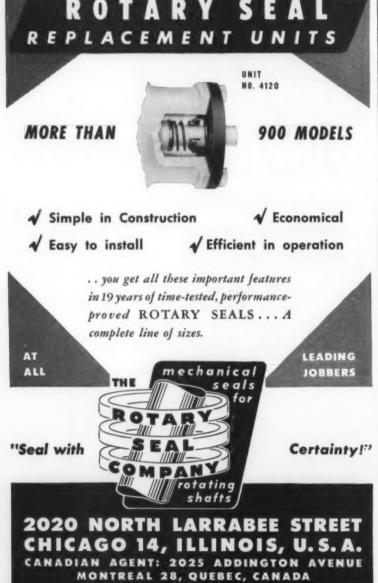
flew to the factory, where he laid out his store, with some suggestions from the factory department head, and closed the deal right there.

Steel, cardboard, and other materials were tried as models, but plastic ones have been settled on as best. They are easy to keep clean, keep their shape well, and look more like the "real thing" than anything else that has been tried.

The models are made true to scale, so the "model" store looks as much like the finished store as possible. The company has found that this is most important in creating a quality impression in the mind of the prospect—and this quality impression is a big factor in influencing sales.

NAMED TO COAST JOB

R. F. "Frank" Spangler has been appointed field service supervisor for the Pacific Coast, Seattle division of Westinghouse Electric Corp.,



KEROTEST GIVES YOU **ANOTHER**

MONEY-MAKER

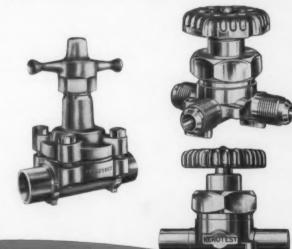


KEROTEST'S NEW DRI-ZIT DR

READ THESE FEATURES

- More drying agent at the same or lower price!
- Only 6 models fit everywhere!
- All ratings from 1/4 HP to 2 HP!
- Standard dimensions that fit everywhere!
- UL approved!

QUALIFIES WITH 100 PIECE PURCHASES!



Again in '50 KEROTEST HAS THE PRODUCTS

KEROTEST MANUFACTURING COMPANY, PITTSBURGH 22, PENNSYLVÁNIA

OFFICES AND WAREHOUSES: New York City Chicago Los Angeles San Francisco Houston Odessa, Texas Richmond Atlanta Toledo St. Louis Charleston, W. Va.

CONTRACTORS News . Activities . Plans

Chicago Contractors Name 1950 Officers, Committees

George T. Howe, of Accurate Electric Refrigeration Service, Inc., was elected president of the Refrigeration and Air Conditioning Contractors Association of Chicago at the annual meeting of the organization. Harry Bransky, of Bransky Refrigeration Co., was elected vice president, and Myer Alexrod, of Continental Refrigeration Service, secretary-treasurer.

Directors elected to serve for 1950 include John Annis, Lipman Refrigeration Sales & Service; Alphonse Gerat, A. G. Refrigeration Sales & Service, Inc.; Earl McLean, Merchants Commercial Refrigeration; Harvey O. Miller, Murphy & Miller, Inc.; T. J. Reedy, North Town Refrigeration Corp.; S. R. Thompson, Thompson-Hense Refrigeration Corp.; and Frank L. Haas, Haskris Co., immediate past president.

Committee Appointments

Committee appointments announced by President Howe are as follows:

Code and Licensing: W. M. Prack, Refrigeration Maintenance Corp., chairman; H. J. Prebensen, Air Comfort Corp., S. R. Thompson, Thompson-Hense Refrigeration Corp.

Finance: Albert G. Weil, Refrigeration Maintenance Corp.. chairman; Myer Axelrod, Continental Refrigeration Service.

Labor Relations and Apprentice Training: Harvey O. Miller, Murphy & Miller, Inc., chairman; John Annis, Lipman Refrigeration Sales and Service.

Legal and By-Laws: H. E. Wheeler, Air Comfort Corp., chairman.

Membership and Attendance: L. C. Anderson, Johnsen Refrigeration Co., chairman; R. P. Christiansen, Haskris Co.; Roy Heier, Air Comfort Corp.; Charles Andersen, Andersen Refrigeration & Heating Co.; Jack Bransky, Bransky Refrigeration Co.

News Bulletin and Publicity: Frank L. Haas, Haskris Co., chairman; Leon Epstein, Reliable Refrigeration & Air Conditioning Corp.; Alphonse Gerat, A. G. Refrigeration Sales & Service, Inc.

Program: Harry Bransky, Bransky Refrigeration Co., chairman; Earl McLean, Merchants Commercial Refrigeration.

Public Relations and Member Relations: Walter McCarty, McCarty Bros. Equipment Co., chairman; Earl McLean, Merchants Commercial Refrigeration; John Annis, Lipman Refrigeration Sales & Service; Myer Axelrod, Continental Refrigeration Service.

Trade Relations and Business Standards: W. C. Ganey, Refrigeration Service Co., chairman; E. O. Hense, Thompson-Hense Refrigeration Corp.; Leo Pochter, Acme Refrigeration Service Co.

BUY FROM YOUR REFRIGERATION WHOLESALER

YORK APPOINTS FOUR NEW DISTRIBUTORS

York Corp. has announced the appointment of four new distributors.

These new outlets are: Calcasieu Lumber Co., Austin, Tex.; Clayton C. Smith Co., Williamsport, Pa.; Hawes Electric Co., Huntington, W. Va.; and Modernized Equipment Co., Cincinnati, O.

Under the York contract these distributors will handle all air conditioning equipment up to and including 30 hp and refrigeration installations up to and including 10 hp, frozen food cabinets and automatic ice makers.

REINHART IS PRESIDENT OF MILWAUKEE GROUP

Albert Reinhart of Real Refrigeration Co. has been elected president of the Milwaukee Refrigeration Contractors Association.

Other new officers are Fred E. Boehme, Fred E. Boehm Refrigeration Co., vice president, and William LaFountaine, Lohuis Co., treasurer. E. D. Merritt was re-appointed executive secretary.

The annual election also resulted in the selection of these directors: J. J. Geering, J. J. Geering Co.; Ben Lake, Lake Refrigerator Co.; Omer Larson, Federal Store Equipment Co.; and Fred Koehler, Koehler Refrigeration Co.

It was also reported that the recent all-industry dinner-dance jointly sponsored by the association, The

What Equipment Food Stores Will Buy in 1950

FIFTY-FIVE out of every 100 grocers are planning to remodel their present stores in 1950, and 67 out of every 100 are planning to buy new equipment of one kind or another, reports the National Grocers Bulletin, publication of the National Association of Retail Grocers, after a recent survey.

Expenditures planned for remodeling ranged from \$50 to \$40,000, and new equipment purchases from \$25 to \$100,000.

Frosted foods cases led the new equipment list from a refrigeration standpoint, 21.6% of the retailers planning to purchase these cases. Next in line are dairy refrigerators, to be bought by 18.6% of the grocers, vegetable display cases, 16%, and meat display cases, 11.5%.

Other types of equipment to be installed by at least 5% of the grocers questioned included walk-in coolers, open-type meat cases, and vegetable coolers. Nine per cent of the stores planned to include air conditioning in their remodeling program.

Refrigeration Service Engineers Society, and the Milwaukee Wholesalers was "highly successful."

The affair was held at the Old Heidelberg Cafe and included a family-style dinner. Free beer was served with the compliments of G. A. Larson Co., Thermal Co., Wisconsin Refrigeration Supply Co., and Refrigeration Parts Co.

It was the first such joint activity held in the Milwaukee area.

BUSHNELL PRESIDENT OF WASHINGTON ASSN.

At the third annual convention of the Refrigeration Contractors Association of Washington, S. W. Bushnell, Refrigeration Engineering Co.,



S. W. Bushnell (left) new president of the Refrigeration Contractors Association of Washington, with E. S. Matthews, regional director of the Refrigeration and Air Conditioning Contractors Association.

Seattle, was elected president; W. C. Stone, W. E. Stone & Co., Seattle, vice president; Arthur M. Carney, secretary; and V. E. Kauffman, Northwest Baker Ice Machine Co., Seattle, treasurer.

An extended program of manufacturer-jobber-contractor relationships was advanced for 1950.

HAL CRUMLY HEADS L. A. CONTRACTOR ASSN.

Hal Crumly, of Pomona, was elected the 1950 President of the Refrigeration and Air Conditioning Contractors Association of Southern California at the annual meeting of the directors of the association.

Serving with Crumly as officers of the association for the year will be Don Beck of W. S. Kilpatrick and Co., vice president; Dale J. Missimer of Pacific Refrigeration Co., secretary and Glenn M. Schlegel of Manual Arts Sales Corp., treasurer, all of Los Angeles.

Directors of the association for 1950, in addition to the officers named above, are Charles E. Hollingworth of Baker Refrigeration Corp.; L. P. Jacobsen of York Corp.; Robert W. Noll of Commercial Refrigeration Co., and J. Frank Park of Western Air & Refrigeration, Inc., all of Los Angeles, and Ralph E. Manns of Ralph E. Manns of Ralph E. Manns Co., Wilmington, Calif. Neal S. Templin continues as

executive secretary of the association, with offices in Los Angeles.

3 NEW DISTRIBUTORS NAMED BY MITCHELL

Three new franchised distributors have been appointed by Mitchell Mfg. Co. for the company's line of room air conditioning units.

These new distributors are: V. J. McGranahan Co., Toledo, Ohio; Southern Wholesalers, Shreveport, La.; Marlin Associates, Dallas, Tex.



PLEASE YOUR CUSTOMERS...

INCREASE YOUR BUSINESS

ONE product does both... Texaco Capella Oil

The positive assurance of customer satisfaction that follows the use of *Texaco Capella Oils* in air conditioning and refrigerating compressors brings increased business to service engineers, dealers and distributors. The reasons for this satisfaction are numerous.

Texaco Capella Oils are highly refined, extremely stable lubricants that are moisture-free and do not react with refrigerants. Their pour tests are very low, and their resistance to carbon, gum and sludge formations is very high. Thus, Texaco Capella Oils keep compressors of every size and type efficient and economical to run.

You can get Texaco Capella Oils in every

needed viscosity . . . in 1-quart, 1-gallon, and 5-gallon sealed containers. Leading compressor manufacturers approve *Texaco Capella Oils*, and experience throughout the industry indicates you'll do a more profitable business with these fine oils. The Texas Company, 135 East 42nd Street, New York 17, New York.

FREE LUBRICATION GUIDE

Lists makes and types of compressors and refrigerants used in 63 electric refrigerating units and 31 air conditioning units. Shows recommended grade of *Texaco Capella Oil* for each. Use guide as wall chart or bind into service manual.



TEXACO Capella Oils

FOR ALL AIR CONDITIONING AND REFRIGERATING EQUIPMENT



TUNE IN . . . TEXACO STAR THEATER presents MILTON BERLE on television every Tuesday night. Consult your local newspaper for time and station.

THE PRACTICAL Refrigeration Applications MANUAL ... by Harold Smith

THE Practical Refrigeration Applications Manual extends a helping hand to those refrigeration and air conditioning men who occasionally encounter field engineering problems too tough for them to handle. Space limitations make it impossible to give complete detailed information covering each step necessary for the installation or erection of refrigeration equipment, insulation or fixtures. It is necessary to assume that those readers who request assistance with their problems are familiar with these basic fundamentals. If they are not, it is suggested that they seek this advice from their sources of supply when purchasing the materials which they intend to use on the job. Most suppliers are equipped to furnish such information. Readers are urged to submit their problems to this department. Each letter of inquiry will be answered personally by the author. The most interesting ones will be published in these columns. All problems should be clearly and completely stated and addressed to: COMMERCIAL REFRIGERATION AND AIR CONDITIONING, Manual Dept., 1240 Ontario St., Cleveland 13, Ohio.

PROBLEM

WE HAVE a problem in regard to sweating or moisture.

"One of our customers has a fur storage vault in his basement. Refrigerator is so constructed that its top is against under part of upstairs floor which is tile. He complains that his floor above storage vault sweats and is afraid that some of his customers might slip and hurt themselves. Ceiling of vault is made of 4 inches of cork.

"Would like to have some suggestion as to how to prevent this sweating."

SOLUTION

IN REGARD to the problem you are having with condensation on tile flooring immediately above the fur storage room, we suspect from what you tell us that cold temperature from the storage room cools the tile and thus when this tile comes in contact with humidity in the air condensation results.

It would seem that normally 4 inches of cork in the ceiling of the fur storage cooler should be a sufficient amount of insulation to retain

the temperature. However, the evidence speaks for itself. So we can only assume that faulty construction exists in the ceiling of this refrigerated room. Just how to correct this situation is rather difficult to state.

One of the things that would eliminate this condensation would be a dead air space between the ceiling of the refrigerator and the floor. This would be rather expensive, however, as it would require tearing out the ceiling of the storage cooler.

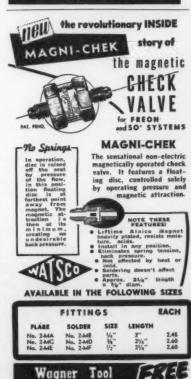
Possible Corrections

It may be possible to correct the situation by adding more insulation to the ceiling of the cooler or a correction could be made by covering the tile with a wood flooring. We have no way of knowing the area involved, so it is rather difficult to advise what would be the best course to follow.

It is quite apparent, however, that the influence of the cold within the cooler has extended up to the tile, cooling them down to a point where moisture is condensed from the air and causing this sweating condition which will probably continue unless one of the three steps which we have recommended is followed.

Should you decide to make any of the changes we have suggested, we would advise you to contact an experienced contractor who understands this situation, such as a contractor experienced in building insulated coolers, to help you work out changes to correct this condition.





Supply Corp.,

43-24 21St LIC NY

Featuring out

complete line of

CONDITIONAL SALES . . .

Continued from page 41

period during which the agreement had been executed and remained unfiled.

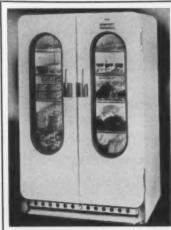
"Since one of the creditors here furnished goods to the bankrupt subsequent to the execution of the conditional sales agreement and prior to its recording," said the court, "we think it clear that the reservation of title therein contained was void as against the trustee in bankruptcy." As the price of its neglect in immediately filing this contract, the refrigeration company's \$534.25 was lost, save for any meager dividend as an unsecured creditor from the assets of the bankruptcy estate. By the same token the firm lost its right to the repossession of the equipment.

In two other features of conditional sale agreements lurk gremlins of the law that often bring grief to sellers unmindful of their dangers. In the collection of an unpaid and past due balance for goods sold in this manner, the dealer has two remedies—he

may either sue for the unpaid balance or to recover his property. He cannot do both.

An instance of this character occurred in Missouri where the seller of equipment secured a judgment for the possession of his property after the buyer had failed to make payments as agreed. Then he sued for the unpaid balance on the account. In the second suit he was unsuccessful. He had his property but he could not have both property and payment.

The seller, said the court, "may at his option or election either retake the property with or without suit or sue for the purchase price. He must elect which action he will take and when he has elected and



Styling that is definitely different is a feature of this new Frigidaire commercial reach-in refrigerator. Distinctive ovalshaped display windows are of triple-pane construction. A completely new forced air cooling system also is featured. Available in 27, 44, and 62-cu. ft. capacities.

pursues that cause to a final judgment he cannot again elect to pursue a different cause of action."

Under the laws of some states a conditional seller is permitted to sue for instalments that are due and unpaid and in the event he is unable to collect to retake his equipment, but even in such cases he cannot sue for the price itself. If he does so he loses his right to retake his property.

Further it has been held that notes accepted for an unpaid balance, if given in payment, forfeit the right of the seller to repossess the goods.

One remaining feature that has been a fruitful source of lawsuits is the extent to which the seller may lawfully go in the recovery of his property without recourse to the courts.



A few years ago the Supreme Court of Oregon had before it an appeal from a judgment for \$1,000 awarded against a dealer who had not wisely but too vigorously sought, without legal process, to recover property on which there was due and unpaid \$4.25.

The charge of the trial court upheld by the Supreme Court of that state was that, "Where the buyer of property on a conditional sale contract makes default in payment, and the seller by the terms of the contract is authorized in such event to retake the property, the seller is entitled under this provision to repossess the property if he can do so peaceably. But if the buyer objects or protests against such retaking, and obstructs the seller in doing so, it is the duty of the seller to proceed no further in such attempted retaking, but to resort to legal process to enforce his rights of repossession. The seller is not entitled to use force to retake possession of such property. If he does so, and in so doing touches the resisting person, he is guilty of assault and battery."

Four Points to Remember

Thus, in return for the added credit security secured by the employment of conditional sale contracts in the merchandising of refrigeration equipment, the successful retailer must without fail observe four imperative rules:

- 1. Immediately upon making a sale, deliver to the buyer a duplicate of the contract signed by the seller.
- Immediately upon making a sale, file or record the contract in whatever public record office the statutes prescribe.
- 3. Determine, in the collection of any past due instalments, between the possession of the merchandise and the possible collection of the account, when resort to the courts are necessary.
- 4. Use no force, except with legal weapons, in the repossession of equipment.

ORR, INC. APPOINTED G-E PARTS DEPOT

Orr, Inc., Pittsburgh refrigeration parts wholesaler, has been appointed a General Electric parts depot, handling G-E condensing units and condensing unit parts in the Pittsburgh area.



ONE FROZEN FOOD CABINET is not enough for the larger store, as this typical scene in Donahoe's food market in Pittsburgh, Pa., clearly indicates. If all these customers were forced to crowd around a single cobinet, many sales would be lost. For further hints on selling frozen food cases, see page 40. (Photo courtesy of Tyler Fixture Corp.)



... this NEW Precision Testing Gauge Set joins the "Serviceman" line

Here's the final answer to your testing gauge needs . . . a handsome new pair of precision instruments for use on manifolds and other testing operations.

Down to the last detail these are real testing instruments. They are calibrated to the high accuracy of plus or minus 1% over their entire range and have knife edge pointers to facilitate close reading. Note that one is a compound retard gauge with wide, easily read, one-pound graduations through the important testing range of 0-50 lbs. and one inch graduations in the vacuum range. The other is equally accurate throughout its 300 lb. range.

Only Marsh experience and advanced production facilities could produce testing gauges of this quality at a surprisingly moderate price. Both gauges have the superlative Marsh heavy-duty bronze bushed movements and the Marsh RECALIBRATOR. The 2½-inch cases are polished brass with screwed and knurled ring, beveled glass crystals, and restriction screw in the connection. Easy removal of the screwed ring provides access to the RECALIBRATOR for quick, accurate adjustment.

Here is the gauge set for the man who wants the ultimate in testing instruments. Ask for new bulletin.

MARSH INSTRUMENT COMPANY, Sales Affiliate of JAS. P. MARSH CORPORATION DEPT. P SKOKIE, ILLINOIS

MARSH PRECISION
Refrigeration Instruments
SINCE 1865

SMALL STORES, BIG FIELD . .

Continued from page 50

own work-load is light.

The average small merchant has only a vague idea of how his store should be arranged. He'll welcome any suggestions he can get from you.

How's the Best Way to Approach the Merchant?

He's not an easy person to sell-so the "easier" your approach, the better. You won't sell him until he knows you. If your servicing gives you an "in", so much the better. Your salesmen can use a contract servicing plan, if you have one, very effectively in prospecting for new business leads.

How Sell Your "Profit Story" on New Equipment?

Use your users. The small food merchant will believe facts, and these are most effective when they come from another merchant who has found that new equipment pays its way in profits. Figures from the factory are a help; and data which many grocer publications publish helps, too. But having him talk to one of your satisfied customers is a sales-clincher you can't surpass.

What Type of Equipment Can Stores Best Add?

1) Self-service cases for packaged meats, dairy products, etc.; 2) frozen food cases-frozen foods are getting a big "push" from packers and sell well even in the smaller stores; they stimulate impulse buying by store patrons; 3) refrigerated produce cases; average produce sales increase 51% in stores using this equipment, and spoilage losses are reduced 60% or more, according to some manufacturers' findings.

How About Frozen Food Cases?

The smaller stores are today's best market for them. Many of these stores don't handle frozen foods now. so for them it's an entry into a new field. That makes frozen foods a special sales problem. Your best bet here is to work with a frozen foods man-he sells the food, you sell the case. In larger stores that now have one low-temperature case, more frozen food space often is needed for really effective volume. So here is both a new and an "add-on" market.

How About Produce Equipment?

A good product-and coming up Produce often determines whether a store makes money or loses it. Refrigeration keeps produce salable two to three times longerand with the average profit margin 25% or higher this can mean that, with refrigeration, the merchant can double his profits in this department.

How Are Prospects Developed?

Your service department is one good way. Cold canvassing is another. In larger cities, newspapers often have available data showing location and size of independent markets. You might check into that in your city. Test mailings of manufacturer's literature will show up prospects, too. Working with a wholesale grocer's field men-on a finder's fee basis-is another fine way to locate good leads.

HNIFLEX

RADIAL FLOW DEHYDRATOR contains SOCONY-VACUUM SOVABEAD



Leak-proof, burst proof! One-piece copper construction; uni-form heavy wall thickness; provided with forged flare nuts and seal bonnets.

Radial Flow design incorporates full length perforated container to provide maximum drying for each pass of the refrigerant. No increase in pressure drop for installations in either liquid or suction line.

SOVABEAD'S hard, smooth, spheroidal structure eliminates

rough, jagged edges that ir off and cause dusting! wear off and cause dusting! Each pound of SOVABEAD effective drying are of over 2,000,000 square feet... NINE TIMES THE SURFACE AREA OF THE EMPIRE STATE BUILDING! SOVA-BEAD is chemically inert; no chemical reaction with water. oils, metals or any commonly used refrigerant gas.

Sizes from 4 to 30 cubic inches.



Low cost axial flow dehydrators with Socony Vacuum SOVABEAD Socony Vacuum also available.

Write new for completely illustrated, new catalog DEPT. 42





SCHAEFER BRUSHES!

because...

They know that by recommending Schaefer brushes their customers will be satisfied with the results that only the finest made will give. Schaefer brushes are fully guaranteed against inferior materials or faulty workmanship . . . assures you of long efficient wear. There is a Schaefer brush to solve every cleaning need - always insist on Schaefer "Job-Tested" brushes.





Copper Tube Fitting

Send Your Cleaning **Problems to Schaefer**

If you have an unusual cleaning problem pass it along to Schaefer's experts for prompt solution.



No. 100—Tin Handle Acid Brushes



No. 144-244 S. S. Wire Tube Cleaning Brushe

SCHAEFER BRUSH MFG. CO.

Title

SCHAEFER BRUSH MFG. CO. "Always Buy Schaefer - It's Safer." 117 W. WALKER STREET, MILWAUKEE 4, WISCONSIN

YOUR PROFITS CLIMB

A COMPLETE LINE OF COMMERCIAL REFRIGERATION FOR EVERY PURPOSE

Every user of commercial refrigeration is a sales opportunity for the Fogel dealer . . . independent food stores, supers, restaurants, drug stores, bars, institutions, bakers, florists.

Fogel cases are priced to clinch sales quickly . . . built to give owner satisfaction . . . backed by over a half century of proven dependability and world-wide acceptance.



Prest O.Lite

REFRIGERATION OUTFIT

ALL-PURPOSE—Handiest kit yet for installer and service man. 3 stems for soldering, heating, and brazing. Detector for locating noncombustible refrigerant gas leaks.

QUICK-Always ready for immediate use. Torch or detector lights instantly. No pumping, priming, or warmup. Detector locates exact source of any non-combustible halide refrigerant gas leak in seconds.

DEPENDABLE—No delicate parts to get out of order. Unaffected by drafts or weather.



Outfit illustrated

CONVENIENT - Compact and light. Easy to use anywhere.

· See your jobber or ask us for further information. The Linde Air Products Company, 30 East 42nd Street, New York 17, N.Y. In Canada: Dominion Oxygen Company, Limited. Toronto.

"Prest-O-Lite" is a trade-mark,

NEW BONDING METHOD SMOOTHS TABLE TOPS

Johnson Plastic Tops, Inc. of Elgin. Ill., has announced that, as a result of a long series of successful tests of new bonding equipment, Formica table and counter tops of extraordinary smoothness are now being produced.

Although Formica surfaces are inherently smooth, the old method of bonding does not entirely eliminate small irregularities. It is these irregularities that cause heavily used Formica surfaces to show signs of wear. The new, smoother surfaces, therefore, may be expected to prolong the life of table and counter surfaces considerably.

Another advantage of this bonding process is that custom table and counter requirements are produced in a fraction of the time formerly required.

NEB. LIQUOR FIRMS CAN SUPPLY DEALERS' UNITS

Makers and distributors of alcoholic beverages are permitted to furnish refrigeration equipment to dealers in Nebraska under supervision of the State Liquor Control Commission under terms of a ruling announced recently.

This reverses the situation which previously existed in the state. In the past, several beer distributors had their licenses revoked or suspended for supplying such equipment to dealers.

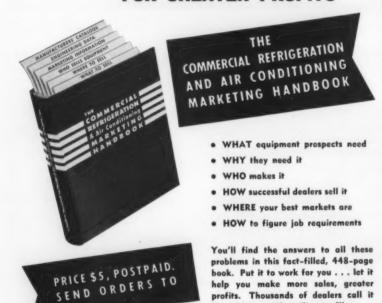
The new ruling, in the opinion of Attorney General Anderson, does not violate the provision of the Nebraska law that denies retailers the right to receive anything of value from manufacturers and distributors. However, the opposite view was held in an opinion given in 1948 by Homer Kyle, assistant attorney general. At that time the commission suspended several licenses because of aid given dealers in obtaining scarce equipment.

Under the new rule, display apparatus for use inside retail establishments may be furnished by distributors. In the interest of sanitation, wholesalers also will be permitted to provide coil cleaning service for draft beer dispensers at not less than cost. Advertising specialties also may be furnished.

However, the state liquor commission must approve all materials given or sold by the alcoholic beverage maker or distributor to dealers.

Order from your local Jobber

CONCENTRATED SOURCE FOR GREATER PROFITS



MANUFACTURERS DIRECTORY CO.

1240 Ontario Street

Cleveland 13, Ohio

profits. Thousands of dealers call it

"an indispensable selling tool".

Unquestionally!... The BIGGEST SHOWCASE VALUE IN AMERICA... Backed by a Firm "MONEY-BACK" Guarantee



All the Geatures of Cases Selling at almost twice the Price!



MM4SC: Self-Contained Show Case Ready for Plug-in Operation

Compact, trouble-free, easily accessible unit. Extra counter stand practical for extra display space, scale or cash register. Write for latest General Refrigerator Booklet CR.

- Triple thermopane high-strength glass . . . reinforced with breaker strip protection
- Finished in gleaming, durable baked enamel with smart chrome trim
- 3 spacious, Corrosion-proof aluminum shelves
- Latest fluorescent lighting insures highest see-ability
- Giant many-finned coils hooked-up in series with protective double baffle
- Smooth-working, handy, hinged rear door
- All parts are available for speedy, easy replacement

Also available in 5 Ft. and 6 Ft. Sizes; and in self-contained models, ready for plug in, all at equally attractive low prices.

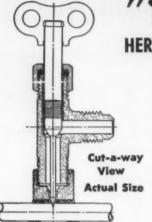
SPECIAL-1/2 H.P. Chrysler Airtemp Condensing Unit . . . \$69.00 Net



Manufacturers Since 1928

GENERAL REFRIGERATORS CORP.

SEE THE NEW



"Tapaline" HERMETIC GAUGE PORT

- · A tool every service man should
- · A permanent gauge port on hermetically sealed units
- To correctly diagnose trouble in refrigeration systems, head and back pressures should be known
- Easy to install-mounts in any position-no special tools needed -fits tight spots

3 SIZES TO FIT 1/4"-5/16-3/8" TUBING

ORDER FROM YOUR DEALER DIRECT \$1.25 EA.

MECHANICAL REFRIGERATION ENTERPRISES

5032 Lankershim Blvd.

North Hollywood, Calif.

for complete self-service

for profitable new business! Get this new Federal Open Case!



DESIGNED FOR FRESH MEATS!

Maintains temperature of 30F or less, Attracts and creates impulse sales. Obtainable with lighted super-structure. Has proven tested features.

• FEDERAL HAS A COMPLETE LINE

of Cases and Refrigerators. Write for our proposition. Some territories still open.

FEDERAL REFRIGERATOR MFG. CO. Waukesha, Wisconsin
Please send me at once, without obligation, complete information on profit making Federal Cases and Refrigerators.
Name
Address
City Zone State



SALES SLANTS . .

Continued from page 47

be seeing you." In my book, that was all he merited until spring.

If that same person had called in as a prospect, it would have been your job to see how far his interest had gone, and to find out what advantages he expected from air conditioning. The first part is important so that you can "get the feel" of his thinking and carry along with it. The second part is invaluable because it enables you to work on him where he's weakest.

Somewhere along the line, after he seems to be a worthwhile prospect, get an idea of the potential cost and get it across to him. There's a definite, desirable psychological advantage to this method. The man is committed to being interested in an expenditure of some approximate amount for air conditioning. It's awfully hard (but certainly not impossible) for him to brush you off after

Every prospect, of course, reserves the right to say no, or to buy from someone else. But he should extend you the courtesy of a willing ear and honest excuses after that. You aren't in a position to call him a stinker if he doesn't eat out of your hand, and you never will be, but you are more in the position of an invited guest than of a gate-crasher. And that's a good feeling.

When you have reached the place where you have decided that this man is a prospect—go to it, and never get off his back!

(Auerbach's third Sales Slant, en-titled "Give Your Prospects a 'Short Course' in Air Conditioning," will appear in next month's issue.)

NEW PACKAGE

Handy & Harman has just announced a new silver brazing alloy package which should prove very convenient for many users of this product.

This package contains 5 ounces of 1/16 inch diameter Easy-Flo-45 wire. "Torch Brazing Instructions" are included.

BUY FROM YOUR REFRIGERATION WHOLESALER BRUNNER

AIR CONDITIONING builds business



Let's cut out the BLANDISHMENTS!

You are in business to make money. So are your customers. So are we.

Brunner put 44 years of experience and a mighty valuable reputation into the design, development and marketing of this new line of self-contained floor-type room air conditioners.

As a product we know it has the last word when answering the questions of user-buyers—price, good looks, dependability, capacity, etc., etc.

The market for self contained floor type air conditioners hasn't been scratched. It is a *big* market, easy to contact, easy to sell and unit installation is simple.

So there you are. You want more profitable business. Your potential customers need air conditioning to protect and develop their business. Brunner has the product. It costs you nothing to find out whether or not Brunner Air Conditioning really does offer a worthwhile greater income.

Write or wire for a Brunner factory representative to show you the facts.

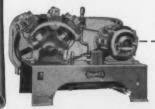




AIR CONDITIONING

- Self Contained 3 HP. to 10 HP.
- Remote Type 5 HP. to 75 HP.

BRUNNER MANUFACTURING CO., Utica 1, New York, U.S.A.



REFRIGERATION CONDENSING UNITS by

AIR AND WATER COOLED MODELS—a size and type for every purpose... 1/4 HP. TO 75 HP.



YOUR TIME IS MONEY!



COMMERCIAL SALES . . .

Continued from page 44

for 1950 is one which anticipates a very good year. We realize, however, that in order to insure our success for the year we must work just a little harder. We expect competition, but we sincerely hope that the year does not develop into one of useless price-, and consequently, throat-cutting."

NCRSA LEAFLET TELLS WHAT PRICE-CUTS COST

In the belief that the serious effects of price cutting on net profits are not always understood or taken into consideration by distributors and dealers, the National Commercial Refrigerator Sales Association has recently published and distributed to members a leaflet entitled, "What It Costs To Slash Prices,"

The leaflet points out the tremendous increases in sales that are necessary to offset various percentage decreases in profit. For example, on a 25% gross margin on sales, a 5% cut requires a 25% increase in sales to produce the same dollar net profit. And this snowballs to a point where a 20% price cut requires a 400% increase in sales volume to produce the same dollar net income.

Another educational booklet issued by the Secretary's office—"The Right Way to Figure Profits"—points out for the benefit of members the fallacies often followed in figuring profits. This booklet, by Thomas A. Fernley, Sr., demonstrates the importance of an understanding of mark-up, gross margin and the need for adequately considering expenses in order to operate profitably.

Literature of this type, issued by the association, is available to others in the industry. Commercial refrigerator distributors not affiliated with the association can receive free copies by writing to: The National Commercial Refrigerator Sales Association, 505 Arch St., Philadelphia 6, Pa.

DISTRIBUTES SERVEL

Refrigeration Parts Co., Brooklyn, N. Y., has been appointed distributor for Servel electric refrigeration condensing units and parts to serve refrigeration contractors, maintenance and service concerns in this area.





LA CROSSE ELECTRIC DIRECT DRAW REFRIGERATED FAUCETS



PATENT PENDING

Refrigerated faucets stop foaming waste—protect beer's quality!! No matter how long the tap is unused - the first drop is cold!! Faucet refrigeration is continuous, either when com-pressor is running or on off-cycle. Available in 2 Keg Model (shown), 3 Keg Model, or La Crosse Combination with either stainless steel or satin black ex-

LA CROSSE COOLER CO.

2809-17 Losey Blvd., So. La Crosse, Wisconsin

presentative: Melvin Pi 80 Htond St. New York, N. Y. Cable Address: Eximport

Why Freeze Yourself Out of Extra Profits?



COMPLETE

FOOD STORES

Now you can figure complete jobs with Hirsh-Standard Shelf Equipment! The Hirsh Plan enables you to sell shelving and equipment that the mer-chant can assemble himself.

- * EASY TO INSTALL TULLY ADJUSTABLE
- * HEAVY DUTY CONSTRUCTION
- * PROFITABLE FOR YOU

Write new for complete information—no obligation.
S. A. HIRSH MFG. CO. 3119 West Lake Street

*CMR	12, 111. 111	
Hame		

OPPORTUNITIES (Classified Advertising)

Rates: for "Pesitions Wanted," \$4.00 minimum, limit 25 words. For all other classifications, \$4.50 minimum for 25 words or under, each additional word 15e; boldface type or all capitals, \$7.50 minimum for 25 words or under, each additional word 20e. Box addresses counts as five words, other addresses by actual word count. All advertisements in this section are payable in advance.

HELP WANTED

A mid-western wholesaler with an established Refrigeration Dept. requires an experienced Salesmanager. Write Box 4150, Commercial Refrigeration & Air Condition-

POSITIONS WANTED

Carefully selected group of trained men graduates of reliable and well established trade school, now available to fill positions in the Radio or Refrigeration field. Willing to travel anywhere. Why not fill that vacancy with an efficient and reliable man. Write Eastern Technical School, 888 Purchase Street, New Bedford, Mass.

FOR SALE

For Sale: 180 ton Patterson-Kelley water chiller. 3 circuits dry expansion one water chamber. Perfect condition—used one season. \$1500.00 FOB Omaha. Gordon Lozier Corp., 1612 California St., Omaha, Nebr.

NEW LINE FOR OLD DEALER

Appointment of Silver-Stahl Corp. of San Francisco as dealer for American Automatic Ice Machine Co., of Faribault, Minn., has been announced

Paragon. CHRONO-SPRAY FAIL-SAFE TIME CONTROLS

for water-spray defrosting



SERIES MG-3

for Locker Plants, Big Unit Coolers, Walk-in Boxes, Air Conditioning, Breweries, Dairies, etc.

Provides three adjustable periods: delay, water spray, and drain. "Fail safe" feature prevents evaporator fans from running during water spray cycle when unit is being defrosted.

> See your jobber or write for free bulletins and installation data.

Paragon ELECTRIC COMPANY

1688 TWELFTH STREET TWO RIVERS, WISCONSIN

America's Foremost exclusive manufacturer of Time Control Switches for all uses, including "de-frost-it" for domestic refrigerators, only



today by Philip Morris, president of the manufacturing company. Nat Silverstone is head of Silver-Stahl



Service doesn't fairen tes Homes from Harry Alton

Jobbers: Ask for special offer!

ICE-X stributo

Illinois

REFRIGERATION
The
RING SQUALITY

0.

3/8

0.0

0 3 2

COSOCA

ONM BRASS & COPPER COMPANY

BRIGHT . ANNEALED . DEHYDRATED . SEALED ENDS

In the Tube Industry - Top Quality has a Penn name

Penn professes no secret formula for quality. This quality control is maintained through the vigilant alertness of each person in Penn's entire organization. Of course, having the finest equipment and packaging helps. Look for the Ring of Quality in tubing and write for Penn's quality control story.

For Zuality Tubing - Say, "Penn Again"

INM BRASS & COPPER COMPANY

ERIE, PENNSYLVANIA, U.S.A. . PHONE 3-5111

Replace it right with RANCO

-most complete line of replacement controls on the market!



Replacement Controls, precision-built by Ranco, give the accurate, dependable, trouble-free service that means more satisfied customers and more profits for you. Select from the most complete line ever supplied to the trade—the quality line of both general and exact replacements for domestic and commercial installations. See your Ranco wholesaler today. Replace it right with Ranco!

anco FIRST

- specialists in refrigeration
- dependability
- greater customer satisfaction
- · less stock to carry
- · more profit to you



World's Largest Manufacturers of Refrigeration Controls . . . more than 20,000,000 controls now in use

HERE'S HOW!

Edited by Warren F. Farr

Pre-delivery Checks Save Call-Backs

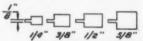
Giving special attention to all new refrigerators before they are delivered to the customer's establishment has helped more than one dealer climb the ladder of successful selling.

Making sure that the new piece of equipment is delivered in perfect condition not only pleases the customer but also eliminates the time, trouble, and expense of unnecessary call-backs by customers whose new units are not operating properly.

Start off right by uncrating each piece of packaged equipment in your shop, so that you can give it the necessary thorough inspection before sending it out. With care, the job can be done simply and safely, without nicks, scratches or broken parts.

Check all items against the packing list as you remove them. Door seals and latches should be checked, and adjustments made if necessary.

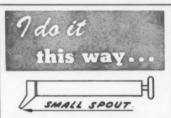




Here's how I make sure of forming good solder joints. I obtained some copper blocks, and had a friend of mine who owns a lathe turn them down to various pipe sizes for me, as indicated in the illustration.

I get these copper pieces tinned, snap on the proper size, heat tubing to be tinned, and then shove the copper plug inside and rotate it as I add solder and apply heat, thus tinning the inside of the tube to be jointed.

Carter White Slate Mills, Va.



Here is an idea that will prove a boon to those servicemen who curse the small size of the oil holes when they are adding oil to a compressor.

This tool is simply an old oil pump that was used on Reo trucks for filling the shackles with oil. It can be picked up from almost any auto junk yard for about 25 cents.

Russell Stallard Chilliwack, B.C.

Final step in the inspection should be an actual operational run to check against such things as excessive noise and vibration as well as proper functioning of the unit.

Keeping Units Level

Here's an idea you might be able to make use of when you come up against the problem of installing refrigeration equipment on floors that aren't level.

Carry a supply of squares cut from composition board in your kit. Choose board about ½" thick and cut it into 2" squares.

Then, when you encounter a floor that isn't level, simply insert as many squares as required under the legs until the unit rests without rocking. Some of the new units have their own leveling devices, but this method will work where you don't happen to have one on the job you're concerned with.

Be a Better Boss

So you figure you're an ideal employer? Then look again!

Maybe you do pay your workers well, but do you realize that there are a host of seemingly "little things" which your employees value as highly as the money itself and which, if properly handled, can build for you a sounder, more loyal organization?

From Nation's Business magazine come these pointed suggestions as to how any average employer—whether he hires one man or 100—can make himself a better boss. Read them over and see how your employee policies stack up against this check list.

1. People want to enjoy work. They do not work for money alone, and higher pay scales seldom smooth out bad conditions.

2. They want appreciation. When they get it they react with spontaneous enthusiasm to their work. They want someone to notice. They need a deep and genuine feeling that





A light which is most handy to use when inspecting the inside of receiver tanks etc. can be made very easily and cheaply from a 6-volt bell transformer, a few feet of No. 18 lamp cord, a wall plug, and a small 6-volt radio or auto bulb.

The bulb (small enough to go through a ¼-inch pipe opening) is soldered on to one end of the cord. The other end is connected to the secondary terminals of the transformer. The cord with the wall plug naturally belongs on the primary winding of the transformer.

Einar H. Martinson Minneapolis, Minn.





9 do it this way...



Here is an idea which I have used for some time. It is a handy pocket tool for connecting gauges, and also has many other uses.

It is made up of a ¼-inch ratchet wrench and a 6-inch adjustable wrench, combined as indicated in the accompanying sketch.

Olgarth Magnfelt Brooklyn, N.Y.

what they are doing is worthwhile.

3. They like a voice in plans. It's the same basic principle that seems to make everyone work harder in a democracy.

4. They must know job aims. They want to know what the company is trying to do. Then they want to know the limits of their own jobs and those of their superiors.

5. They want respected leaders. They must be able to look up to those they work for and have the feeling that the boss will go out and fight their battles.

WANT TO EARN \$5



You don't have to be a writer or a literary genius! Just jot down some of the shortcuts you've developed in your maintenance or installation work and send them to Here's How Editor, Commercial Refrigeration and Air Conditioning. Your \$5 will be paid promptly when your maintenance tip is published in the magazine. Let's hear from you!



TAPE Drip Tape around cold water pipes, suction lines and joints running from refrigerating

machines to condensers. It's clean and easy to put on.

Also used on refrigerant lines in air

Also used on refrigerant lines in air conditioning systems and on cold water pipes in basements.

CONTRACTORS—Include No Drip Tape protection in your estimates, not only for stopping drip, but for the sake of good appearance on all your finished installations. Roll to cover about 10 feet of ½" pipe. \$169

LIST

Higher west of Rockies and Canada. Order through your supply house or write us for information.

J. W. MORTELL CO. Technical Coatings since 1895 553 Burch St., Kankakee, III.





Recognized as the Symbol of Quality!



IF YOUR JOBBER DOESN'T STOCK-

CYRUS SHANK CO.

631 W. Jackson Blvd.

Chicago 6, III.

INDEX TO ADVERTISERS

APRIL. 1950

APRIL, 1950
Acme Industries, Inc
Alco Valve Co
Harry Alter Co. 90 American Platinum Works 57
Ansul Chemical Co
Automatic Products Co Cover 3
Bailey & Perkins Co 64
Bell & Gossett Co
Brunner Mfg. Co
Bush Mfg. Co
Cee-Kleer Products Co
Chicago Seal Co. 58 Coldin Cabinet Co., Inc. 89 Complete-Reading Electric Co. 89
W. B. Connor Engineering Corp 7
Copeland Refrigeration Corp
Curtis Mfg. Co 8
Dayton Rubber Co
Eastern Industries, Inc
Eston Chemicals, Inc 96
Federal Refrigerator Mfg. Co
Freez-King Corp
Frigidaire Div., General Motors Corp 11
General Electric Co., Air Cond. Dept 26, 27
General Refrigerators
Highside Chemicals Co
International Register Co 68
Jarrow Products
Johnson Plastic Tops, Inc
Kelvinator Div., Nash-Kelvinator Corp60, 61
Kerotest Mfg. Co
Koch Refrigerators 10 Kold-Hold Mfg. Co. 69 Kramer Trenton Co. 20
LaCrosse Cooler Co 90
Larkin Coils, Inc
Linde Air Products Co., Unit of
Lynch Corp
Marley Co., Inc
Jas. P. Marsh Corp
Mills Industries, Inc
Mueller Brass Co 88
National Lock Co
Dackless Metal Dreducts Co. Q4
Peerless of America, Inc
Paragon Electric Co. 90 Peerless of America, Inc. 52 Penn Brass & Copper Co. 91 Penn Electric Switch Co. 30
ryramig instrument co
Ranco, Inc. 92 Reliance Electric & Engineering Co. 67
Remco, Inc
Remco, Inc. 28 Revere Copper & Brass, Inc. 21 Rotary Seal Co. 74
Schaefer Brush Mfg. Co
Cyrus Shank Co
Superior Valve & Fittings Co 22
Techniflex Corp
Terror Co
Tilden Tool Mfg. Co
Tyler Fixture Corp. 53 Typhoon Air Conditioning Co., Inc. 63
Union Carbide and Carbon Corp
Linde Air Products Co., Unit
Wagner Electric Corp
Wagner Electric Corp



Wagner Bearings Are BEST!

Genuine Wagner 87% tin babbit-lined bearings are best because they have:

- 1. Extreme load-carrying capacity.
- 2. Excellent anti-seizure properties.
- 3. High resistance to corrosion by acids present in oils.

...and Easiest to Install with the new Wagner bearing tool

Worn sleeve bearings can be removed and new Wagner precision-bored bearings can be inserted in a single easy operation with this new time-saving tool. No hammering on bearing ... no reaming ... no spoilage. You get perfect alignment every time! Four sizes take care of most jobs, including all thin wall, split, or roll bearings. They're priced right, too! Only \$11.80 per set. Order yours today. Use the coupon below



WAGNER ELECTRIC CORPORATION • 6442 Plymouth Ave., St. Louis 14, Mo. Please ship the following bearing tools:

Quantity	Tool No.	Fin. Brg. Size	List Ea.
	SA-846	.655"	\$2.50
	SA-860	.751"	2.60
	SA-847	.812"	3.00
	SA-848	1.062"	3.70



BEARINGS + BRUSHES + CAPACITORS

COMMUTATORS + STANDARD ROTORS

SERVICE EXCHANGE MOTORS + NEW MOTORS

450 AUTHORIZED SERVICE STATIONS OR PARTS DISTRIBUTORS

ESTON

Covers the Country!

THERE IS AN ESTON REPRESENTATIVE AND WAREHOUSE NEAR YOU

Portland

KEY

- Eston Plants
- Sales Offices
- Warehouses
- Kinetic Plants
- Kinetic Warehouses

Minneapolis .

Des Moines

Omaha *

Wichita

Oklahoma City *

Denver

*Kansas City

• Memphis * Tulsa

Danville Manapolis

* Atlanta

Jacksonville •

Miamie

Buffalo Jersey Carney's Point

Washington, D.

San Francisco

Los Angeles

Phoenix

Dallas *

Houston

METHYL CHLORIDE SULPHUR DIOXIDE "FREON-11-12-22-114"

> Your orders can be filled immediately for any refrigerant requirement.

> > Remember

NO CYLINDERS - NO DEPOSIT

CALL YOUR LOCAL

ESTON CHEMICALS,



NEW MULTI-PURPOSE
Model 73 RJX Solenoid Valve

THESE FEATURES MULTI-PURPOSE MODEL 73 RJX

- ONE Solenoid replaces MANY, handling all non-corrosive liquids, gases, air.
- Extra Wide Capacity Range avoids carrying valves for varying needs.
- Positive, fast action on minimum power, due to "floating impact type" plunger.
- Silent, free from vibration and noise, with exclusive shading coil, 3-point stop, and floating plunger action.
- Requires less installation time and effort, with 4-position mounting bracket, and wiring from several positions.

Here's a new idea in control versatility...a single solenoid that can be used with any non-corrosive liquid—refrigerants, including Freon 22, water up to 185° and oil, as well as gases and air.

EXTRA CAPACITY RANGE

Small, compact in size, the new A-P Model 73 RJX has a tremendously wide range of capacity. For instance, with Freon 12 it is rated 2.4 tons at 2 lb. drop to 12.5 tons at 10 lbs. With Freon 22 the range is 2.88 tons to 14.9 tons, and with Methyl or Sulphur it is 4.92 to 25.65 tons. With water and similar liquids the Model 73 RJX will handle 42 gallons per hour at 2 lbs. pressure or up to 606 gallons at 100 lbs. pressure. Three orifice sizes are available — 5/32", 3/16", and 7/32", with maximum operating differentials at 275, 200, and 125 lbs. respectively.



Handy bracket permits mounting in any of several positions.

Coil Cover can be moved for greater convenience in wiring.

"Moisture-proof" coils prevent coil burn-outs.



Improve your systems, simplify your service now with the new A-P Multi-Purpose Model 73 RJX Solenoid. See it at your Wholesaler, or write for bulletin RWS 100.

AUTOMATIC PRODUCTS COMPANY

2486 North Thirty-second Street • Milwaukee 10, Wisconsin Export Dept., 13 East 40th Street, New York 16, N. Y.

DEPENDABLE Refrigeration Values

STOCKED AND SOLD BY GOOD REPRIGERATION WHOLESALERS EVERYWHERE . . .

Mr. Businessman!

WHAT WILL THE 1950 CENSUS DO FOR YOUR BUSINESS?

CONSUMER MARKET INFORMATION

The 1950 Census will provide a huge amount of information about the characteristics of the consumer market. It will tell you what kind of income groups live where . . . what they have and what they need in the way of commodities from automobiles to television sets down to plumbing fixtures. The Census is an accurate survey of economic conditions in your market area. It will not only tell you where your customers are, but what they need that you have to sell them!

It will show where improved transportation and shipping facilities are needed . . . better harbors and waterways . . . stepped-up Public Service.

That is why the 1950 United States Census is vital to your business!

COOPERATION

You know that the Census-Taker is not just "counting heads." He's actually making a survey of existing conditions in industry, business, employment, housing, education. You know census information is as confidential as the vote you cast! Because you know all these things you'll cooperate with the Census-Taker in every way when he calls on you.

WHAT ABOUT THE OTHER FELLOW?

But! What about the people who work for you? The man in the shop...your own secretary... the fellows in the shipping room. Do they know all this about the Census? Chances are some of them do, so the idea is to get the right information across to those who don't!

WHAT'S THE BEST WAY?

If it's possible, call everyone together and talk about it ... ask questions ... exchange ideas. If your outfit is

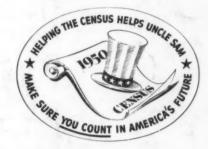
too big for that, direct a Census information memorandum to all your employees. Post information on the bulletin boards. Run a Census story in the company house organ. Talk about it. Every way you can . . . get the people who work for you to cooperate with the Census.

WHAT DOES THE 1950 CENSUS MEAN TO YOUR EMPLOYEES?

Better schools . . . school buses . . . school lunches. It means finer roads, bridges and highways . . . ircreased transportation facilities . . . improved safety regulations. It creates more efficient Public Service and furthers adequate distribution of utility services such as telephones, gas, water and electric power. It will help your community plan better parks, playgrounds, recreation areas and housing. It will mean higher living standards and accurate congressional representation. The Census is everybody's voice in America's future!

YOU OWE IT TO YOURSELF ...

Mister Businessman . . . to your business and your community! Put your efforts behind the 1950 United States Census for an even better country to live in the best country to do business in!





Like other American business firms, we believe that business has a responsibility to contribute to the public welfare. This advertisement is therefore sponsored by

COMMERCIAL REFRIGERATION and AIR CONDITIONING
1240 ONTARIO STREET CLEVELAND 13, OHIO

